


HANDBOUND
AT THE



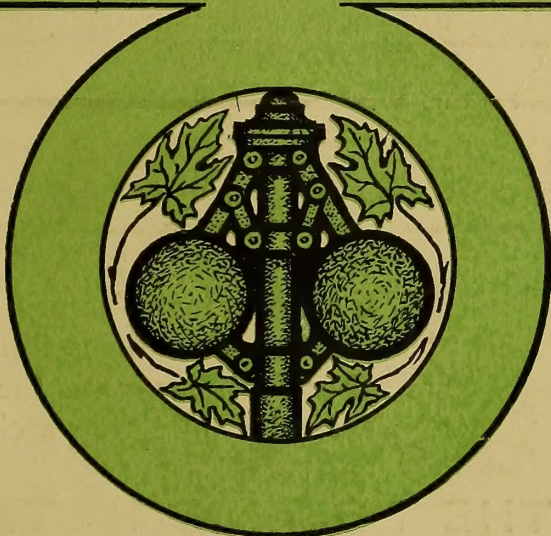
UNIVERSITY OF
TORONTO PRESS



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INDUSTRIAL CANADA



THIS LOOKS LIKE PROSPERITY

Compare this table of the VALUE of field crops in Canada for the years 1914, 1913 and 1912. Is it a surprise to you to find 1914 better than 1913—better even than the banner year, 1912?

VALUES OF FIELD CROPS IN CANADA, 1912-1914

PROVINCES	1912	1913	1914
Canada	\$557,344,100	\$552,771,500	\$638,580,300
P. E. Island.....	59,456,000	9,535,500	11,544,000
Nova Scotia	19,420,000	17,132,900	21,969,700
New Brunswick	17,295,700	17,965,100	20,045,100
Quebec	69,901,000	88,589,000	99,279,000
Ontario	198,715,000	167,835,000	196,220,000
Manitoba	71,647,000	64,557,000	65,528,400
Saskatchewan.....	115,813,000	129,376,000	152,751,500
Alberta	44,503,400	46,712,000	59,779,600
British Columbia	10,593,000	11,069,000	11,463,000

From Dominion of Canada Census and Statistics Monthly for January, 1915

After all, "hard times" are largely a mental condition. It is in the influencing of NATIONAL mental conditions that a modern, well-equipped advertising agency does its best work.

Why not send us a few clippings of your advertisements or copies of your circulars, particulars of your product and its distribution in Canada, and let us figure out a comprehensive advertising and selling plan for your business?

ESTABLISHED
1898

J. J. GIBBONS Limited
AGENTS FOR ADVERTISERS IN CANADA

CODE—A.B.C.
5th EDITION

WINNIPEG

TORONTO

MONTREAL

**PUBLISHED BY THE CANADIAN
MANUFACTURERS ASSOCIATION INCORPORATED.**
HEAD OFFICE BRANCH OFFICES,
• TORONTO • MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC

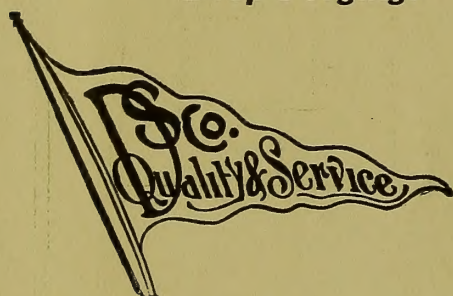
MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

Automobile Parts

Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

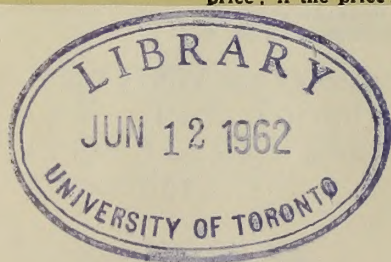
WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED

Walkerville, Ont.

QUALITY

"No good man did, or ever should encourage cheapness at the ruinous expense of *unfitness*, which is always infidelity, and is dishonorable to a man. If I want an article let it be genuine, at whatever price: if the price is too high for me, I will go without it, unequipped with it for the present,—I shall not buy with hypocrisy at any rate. This, if you will reflect, is primarily the rule



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no. 1-6

petroleum at our works, Ashbridge's
o, we nailed our colors to the mast
ducts have gained such an enviable

TURE

LAMP OILS
PARAFFINE WAX
ASPHALTIC ROAD OILS
FOR AND ELECTRIC PLANTS

The **BRITISH AMERICAN OIL CO. Limited**
REFINERS

BRANCHES
Montreal, Ottawa, London

HEAD OFFICE
Lumsden Building, Toronto

WE MAKE **THAT GOOD OIL!**

What says your dictionary of economy?

THERE absolutely is *no upkeep* cost with the Dart Union pipe couplings. Pipe connections made with them *never leak or cause trouble*. That's economy all right, but they give more, for the bronze to bronze ground joint *will not deteriorate* and does not have to be remade or renewed to make another sure connection.

Dart Union pipe couplings *spells economy* for every one who has his pipe connections made with them. We'll be glad to send unions to *prove this economy* to you. They are made in Canada and sold by Canada's leading supply houses.

Dart Union Co., Limited
TORONTO, ONT.

CONTENTS

	Page		Page
Editorials	39-43	Transportation	54
Progress of Toronto Harbor Work	44	BY J. E. WALSH.	
BY A. C. LEWIS.		Insurance	55
Harbor Development at St. John, N.B.	47	Tariff	56
BY R. E. ARMSTRONG.		BY J. R. K. BRISTOL.	
Improvements of Quebec Harbor	48	Legislation	58
Our Manufacturers and War Orders	50	Forest Products of Canada	66
BY H. M. P. ECKARDT.		Trade Enquiries	72
Honor Roll of Canadian Manufacturers	52	Among the Industries	82

INDEX TO DISPLAY ADVERTISEMENTS

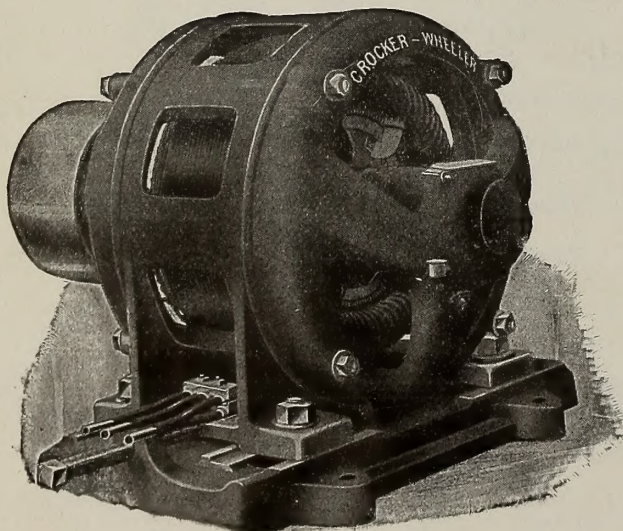
Albert Mfg. Co.	73	British American Oil Co., Limited	Inside Front Cover	Canadian H. W. Johns-Manville Co., Limited	31
Andrews, H. V.	79	Brown Bros., Limited	79	Canadian National Exhibition	12
Armstrong Whitworth Co. of Canada, Ltd.	67	Butterfield & Co.	74	Canadian Oil Co.'s, Limited	100
Ault & Wiborg Co. of Can., Ltd.	20	Canada Carbide Co., Limited	81	Canadian Pacific Railway Co.	68
Banfield, W. H., & Sons	72	Canada Metal Co., Limited	69	Canadian Sirocco Co., Limited	27
Bank of British North America	11	Canada Paper Co., Ltd.	28	Canadian Street Car Advertising Co., Limited	3
Beatty, M., & Sons, Limited	100	Canada Wire & Iron Goods Co.	13	Canadian Tube & Iron Co., Limited	23
Berlin Machine Works, Limited	6	Canadian Appraisal Co., Limited, The	69	Canadian Westinghouse Co., Limited ..	37
Berry Bros.	13	Canadian Bank of Commerce	80	Canadian Winkley Co., Limited	88
Bertram, John, & Sons, Limited	7	Canadian Billings & Spencer Co.	20	Chapman Double Ball Bearing Co. of Canada, Limited	34
Bird & Son	71	Canadian Bridge Co., Limited	22	Chicago Bridge & Iron Works	79
Boiler Inspection and Insurance Co. of Canada	82	Canadian Car & Foundry Co., Limited ..	24	Clarke, A. R., & Co., Limited	73
Boiler Inspection Department, Ontario Government	79	Canadian Consolidated Rubber Co., Ltd.	Outside Back Cover	Condensed Advertising	62
Booth-Coulter Copper & Brass Co., Ltd., The	100	Canadian Crocker-Wheeler Co., Limited ..	2	Conduits Co., Limited	91
Bradstreets	84	Canadian Drawn Steel Co., Limited	89	Consolidated Mining & Smelting Co. of Canada, Limited, The	33
Brigdens Limited	35 and 36	Canadian Hart Wheels, Limited	86		

(Continued on next page.)

INDEX TO DISPLAY ADVERTISEMENTS—Continued

Dennis Wire & Iron Works	65	Imperial Oil Co., Limited	64	Page Wire Fence Co., Limited	20
Dodge Mfg. Co., Limited	18	Industrial Canada Convention Number..9 and 10		Paterson Mfg. Co.	38
Dominion Abrasive Wheel Co., Limited..	65	Jeffrey Manufacturing Co.	25	Pedlar People, Limited	15
Dominion Belting Co.	84	Jenckes Machine Co., Limited	74	Penman's Limited	25
Dominion Bridge Co., Limited	22	Jones, J. L., Engraving Co., Limited	69	Polson Iron Works, Limited	82
Dominion Stamping Co., Limited		Jones & Moore Electric Co., Limited ..	91	Pratt & Letchworth Co., Limited	
.....Inside Front Cover		Kennedy, Wm., & Sons	23Inside Front Cover	
Dougall Varnish Co.Inside Back Cover		Kerr Engine Co., Limited, The	27	Purdy, Mansell, Limited	90
Du Pont Fabrikoid Co.	21	London & Lancashire Fire Insurance Co., Limited	72	Rapid Electrottype Co.	65
Eddy, E. B., Co., The	15	Lysaght, John, Limited....Inside Back Cover		Richards Wilcox Canadian Co., Ltd.	81
Edward Partington Paper & Pulp Co. .	30	Martin Corrugated Paper & Box Co., Ltd.	30	Riordan Paper Co., Limited	31
Electric Steel and Metals Co.	81	Massey-Harris Co., Limited	78	Ritz-Carlton Hotel	64
Elder Dempster & Co., Limited	76	McKenzie, The D., Machinery Co.	5	Roland Paper Co., Limited, The	31
Empire Typewriter Co.	14	McKim, A., Limited	66	Royal Bank of Canada	80
Eureka Mineral Wool & Asbestos Co.	26	McLaren, D. K., Limited	85	Russell Motor Car Co., Limited	19
Ford Motor Co. of Canada, Limited	62	McLaren, J. C., Belting Co., Limited ..	85	Rutherford, The Wm., & Sons, Limited ..	88
Galt Malleable Iron Co., Limited	70	Meadows, The G. B., Iron & Brass Works Co., Limited	5	Sadler & Haworth	19
Gardner, Robert & Son	86	Metal Shingle & Siding Co., Ltd.	65	Scythes, J. L., Co.	71
Garlock Packing Co.	75	Metallic Roofing Co., Limited	67	Sheldons, Ltd.	34
General Fire Equipment Co., Limited ..	72	Montreal Lithographing Co., Limited	70	Smart-Woods, Limited	77
Gibbons, J. J., Limited....Outside Front Cover		Montreal Locomotive Works, Limited....	32	Steel Co. of Canada, Limited, The	8
Goderich Organ Co., Limited, The	89	Morrow, John, Screw & Nut Co., Ltd....	33	Structural Steel Co., Limited	22
Goldie & McCulloch Co., Limited, The..	16	Morton, Phillips & Co.....	84	Tallman Brass & Metal Co.29 and 32	
Goodhue, J. L., & Co.	85	National Acme Manufacturing Co., The..	4	Thomson, Tilley & Johnston	20
Goold, Shapley & Muir Co., Limited	79	National Fire Protection Association.....	13	Thompson & Norris Co. of Canada, Limited	
Gourlay, Winter & Leeming	12	New Zealand Shipping Co., Limited....	76Outside Back Cover	
Gramm Motor Co., Limited	21	Nichols Chemical Co., Limited, The....	89	Toronto Furniture Co.	83
Grasselli Chemical Co., Limited	17	Nicholson File Co.	26	Toronto Harbor Commission	63
Greening, The B., Wire Co., Limited	17	Northern Aluminum Co., Limited	91	Toronto Hydro-Electric System	61
Gutta Percha & Rubber Manufacturing Co., of Toronto, Limited....Inside Back Cover		Northern Electric Co., Ltd.	27	Union Drawn Steel Co., Limited	89
Hamilton Bridge Works Co., Limited....	22	Nova Scotia Steel & Coal Co., Limited .	32	Victor Saw Works, Limited	21
Hinde & Dauch Paper Co. of Canada, Limited, The	28	Ontario Government Notices	26	Vogel Co. of Canada, Limited	90
Howard Smith Paper Mills, Limited	29	Ontario Wind Engine & Pump Co., Ltd....	29	Walker, Hiram & Sons	87
		Otterville Mfg. Co., Limited	89	Williams Mfg. Co.	65

FOR BUYERS' GUIDE, SEE PAGE 92.



THE DESIGN OF CROCKER-WHEELER INDUCTION MOTORS

INCLUDES :

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features;
Bulletin 155 describes them.

THE CANADIAN CROCKER - WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works: St. Catharines

District Offices: Montreal, Toronto, Vancouver

The Time to Advertise

You are well aware of how conservatively the retailer is buying to-day---what he must have he buys, but nothing else.

He is confining himself more closely than ever to advertised lines---lines for which his customers ask.

These he is compelled to carry---the others have to wait.

Never before has advertising been so necessary as it is to-day.

Many Manufacturers will not see this---or seeing it, will not take advantage of the opportunity it offers them.

The Manufacturer who advertises now will get all the business that is going, and he will be laying a solid foundation on which to build for the expanding business of the near future.

In this connection we have a proposition that will interest you.

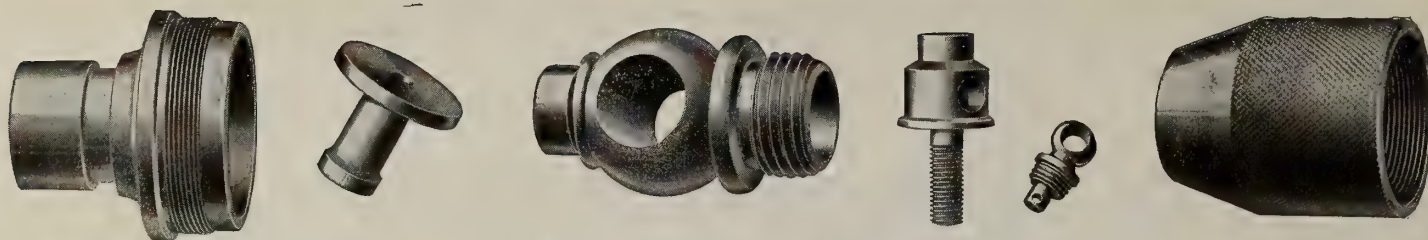
Street car advertising is a Manufacturer's proposition.

It is national in scope, reasonable in price and reaches a larger number of people at less cost than any other form of Publicity.

It is worth your while to get all the facts.

Let us come and talk it over with you. Address any of our offices.

The Canadian Street Car Advertising Co., Limited
Montreal Toronto Winnipeg



Screw Machine Products

Made Right—

—Delivered On Time

THE NAMCO PLANT at Montreal is equipped to handle all of your special screw cutting up to 2½ in. stock diameter.

You'll get accuracy and exceptionally good finish on NAMCO Products; you'll be insured against delays.

These twenty-two pieces suggest the range of work and the quality that is uniform.

Send your samples or blue prints for prices and a delivery schedule. Estimates free.

STANDARD SCREWS, NUTS AND STUDS

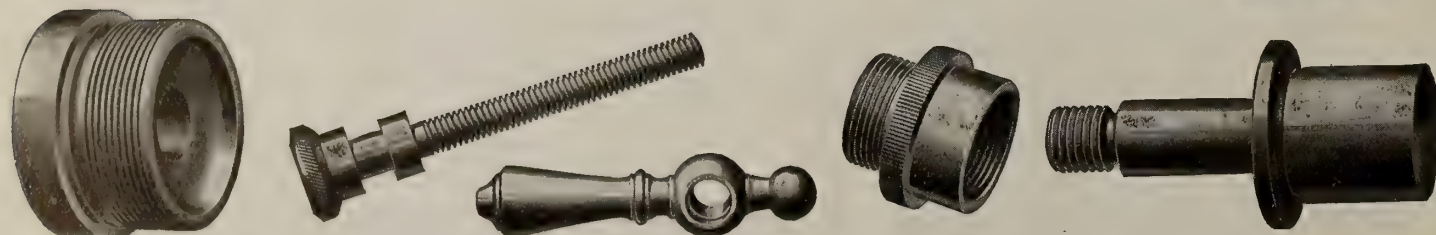
are shipped the day your order is received Complete size and style assortment carried in neat packages or bulk.

TWO BOOKLETS SENT ON REQUEST

"CANADIAN PRODUCTS" if you use special screw machine work.

The "RED BOOK." List of standard parts.

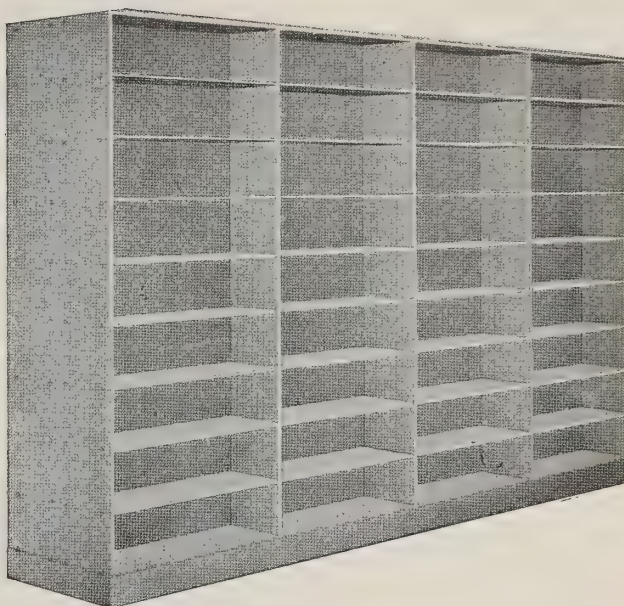
**THE NATIONAL-ACME
MANUFACTURING CO.
MONTREAL P.Q.**
IN ST. HENRI AT G.T.R.



Wire Stock Room Partitions



Steel Storage Bins



MANUFACTURED BY

THE GEO. B. MEADOWS, Toronto
Wire, Iron and Brass Works Co., Limited

479 Wellington St. West, Toronto, Canada

Built-in Merit

If Canadian-Made Goods are to hold their own,
 they must be:

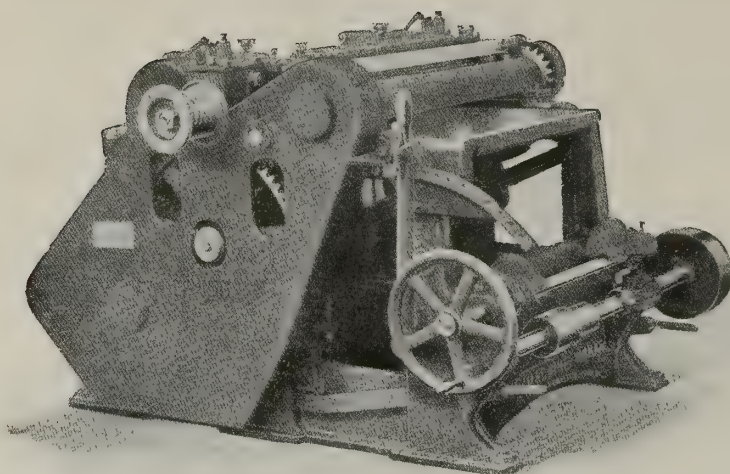
1. OF GOOD QUALITY
2. REASONABLE IN PRICE



These are the principles on which our
LATHES, SHAPERS AND HACK SAWS
 are manufactured and sold.

Write for catalogue and price list.

THE D. McKENZIE MACHINERY CO.
 GUELPH, ONTARIO



Compare Your Present Surfacer Equipment With This Berlin-Cabinet-Surfacer

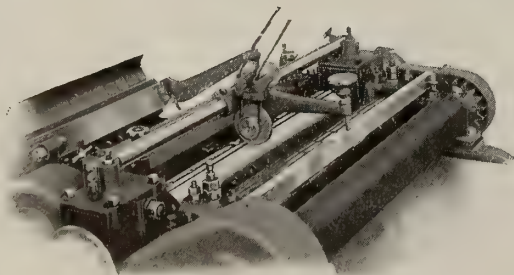
The Berlin was the first single surfacer to which thin knives, round heads and on-the-machine grinding device was applied. This was brought about by the growing need of a planer that would handle a large range of stock and produce a smooth finish that left little or nothing for the sander.

Such work resulted through the use of the round heads equipped with self-hardening thin steel knives. The direct advantage of this equipment, aside from its safeness, is that it gives a scrape cut identical with that used in finishing the finest woods by hand, and with least waste of stock produces a straight grain finish on cross-grained or twisted wood. The even pressure put on knives close up to the cutting edge assures a cut that will not tear grain around knots or clip the ends of short stock.

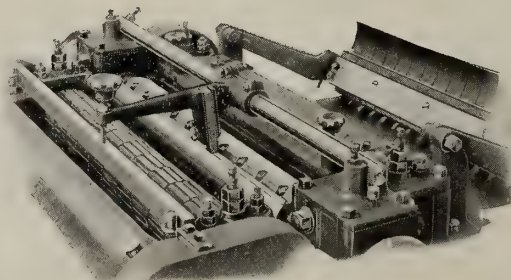
Sturdy construction is followed throughout the machine and permits of more dependable work at double the speed of the old thick-knived surfacers. The production is not only double, therefore, that of the maximum on the old machines, but by removing causes for the old accustomed stops that caused the knives to "dig" into the wood and prevented a smooth finish, the actual running time is made longer.

Now is the time when the saving which this machine effects will be most welcome, so now is the right time to write for particulars.

These set-grind-joint devices made better cabinet surfacing possible



Showing grinder in position.



Showing jointer in position.

A true cutting circle is obtained while the head is running full speed, so that each knife takes off a fine thin shaving. Such a cut enables using stock that otherwise would have to be thrown out or used for low grade products. A few minutes' grinding daily without the necessity of breaking your setting, keeps knives in proper condition to turn out high-grade work all the time.

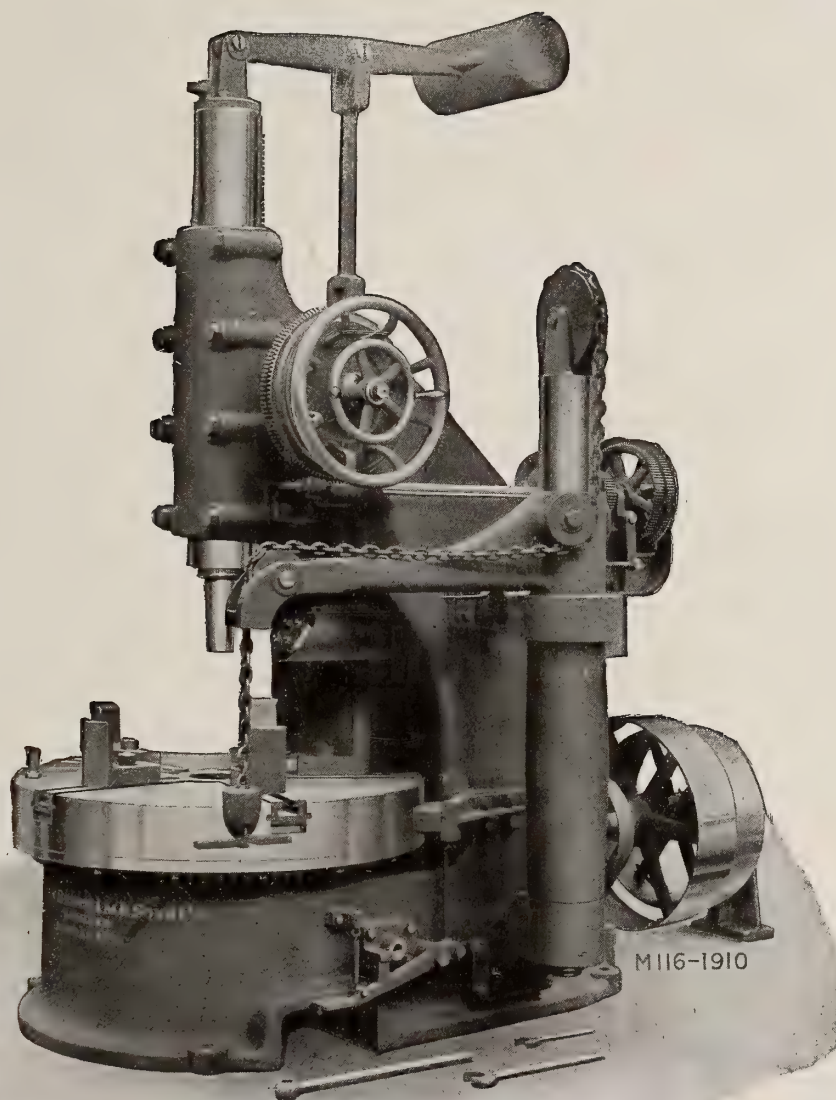
Hamilton, Ontario

BERLIN MACHINE WORKS, LTD.

Beloit, Wis., U.S.A.



BERTRAM MACHINE TOOLS



42" CAR WHEEL BORER EQUIPPED WITH AIR
HOIST FOR WHEELS

We Manufacture a Full Line of Locomotive and
Car Shop Machinery

THE JOHN BERTRAM & SONS CO., Limited

DUNDAS, ONTARIO, CANADA

723 Drummond Bldg.
MONTREAL

VANCOUVER

Bank of Hamilton Bldg.
WINNIPEG



"HAMILTON"
**PIG IRON,
STEEL & IRON
BARS**

**"TIGER" WHITE LEAD
WIRE, WIRE NAILS, STAPLES,
WOOD AND MACHINE SCREWS, PUTTY,
WROUGHT PIPE AND
NIPPLES**

**"INVINCIBLE" FENCING,
BOLTS AND NUTS.**

PROMPT SHIPMENTS

SALES OFFICES:

HAMILTON, MONTREAL, WINNIPEG

TORONTO, VANCOUVER

VICTORIA, ST. JOHN

HALIFAX



ON July 1st, 1915, the Canadian Manufacturers Association will make a big contribution to the business activity of Canada by the publication of a Special Convention Number of "Industrial Canada."

An advertisement in this issue will receive the friendly consideration of practically every manufacturer of size throughout Canada. Membership in the Association establishes a relationship which you will do well to cultivate. Have your advertisement appear with those of your fellow-members. Become known as a maker of "Made-in-Canada" goods.

Advertising rates in Convention Number of "Industrial Canada" are:

Full page \$35. Half page \$20. Quarter page \$12.

TEAR OFF HERE.

Canadian Manufacturers Association, Toronto

Reserve full, half or quarter page advertising space in the Special Convention Number of "Industrial Canada."

Signed _____

Kindly send order to

Canadian Manufacturers Association,
"Industrial Canada" Department,
Traders Bank Building,
Toronto.

**CONVENTION
NUMBER**

“Industrial Canada”

JULY 1st, 1915

A Call to Action

THE manufacture of products which are used either as equipment or raw material for other manufacturers is a national duty. A hundred millions of dollars are being expended now in Canada on war supplies. Factories in many lines are busy on these contracts:—foundries, woollen mills, brass mills, clothing factories, wagon factories, car shops, and a score of others.

Consider for a minute the subsidiary industries that are involved in this demand. Box factories are making containers, cloth is being rushed for uniforms, tanneries are supplying shoemakers and saddlers. Buckles and buttons and a thousand other incidentals must be made.

Where do you come in? In one of three ways. You manufacture equipment; or you manufacture the raw material for those who have war orders; or you manufacture machinery, or belting, or boxes which are used in the production and distribution of these enormous orders.

Remember that all these factories cannot operate without wear and tear in the plant. New equipment and new stock must be ordered. Are you getting the orders?

Get in touch with the manufacturers who are replenishing their stock and keeping up their plants. Have an advertisement in the

CONVENTION NUMBER

“Industrial Canada”

Published by

CANADIAN MANUFACTURERS ASSOCIATION

This number will report the Annual Meeting of the Canadian Manufacturers Association and will put you in close touch with manufacturers from one end of Canada to the other.

TEAR OFF HERE

.....1915

CANADIAN MANUFACTURERS ASSOCIATION
Toronto

Dear Sirs :

In the Convention Number of “Industrial Canada” reserve Full, Half or Quarter Page advertising space at a cost of \$35, \$20, \$12. Copy will follow.

Signed

Send order at once to

CANADIAN MANUFACTURERS ASSOCIATION

Publishers of

“Industrial Canada”
TORONTO

THE BANK OF BRITISH NORTH AMERICA

ESTABLISHED IN 1836. INCORPORATED BY ROYAL CHARTER IN 1840.

PAID-UP CAPITAL, \$4,866,666.66

RESERVE FUND, \$3,017,333.33

SEVENTY-NINTH ANNUAL REPORT AND BALANCE SHEET

Report of the Directors of The Bank of British North America, Presented to the Proprietors at Their Seventy-Ninth Yearly General Meeting, on Tues., Mar. 2, 1915

The Court of Directors submit the accompanying Balance Sheet to 30th November last. It will be seen that the profits for the Year, including \$108,437.55 brought forward from 29th November, 1913, amount to \$645,014.27, of which \$194,666.66 was appropriated to a dividend paid last October, leaving a balance of \$450,347.61, out of which the Directors propose to declare a Dividend of 40s. per Share, payable, less Income Tax, on 3rd April next, leaving a balance of \$167,081.69 to be carried forward.

The above Dividend will make a distribution of 8 per cent. for the year.

The Dividend Warrants will be remitted to the Proprietors on the 1st April next.

During the year that closed 30th November last, Branches were opened at Bromhead, Sask., and Prince George, B.C., a Branch was closed at Paynton, Sask., and a Sub-Branch at Upper Lonsdale Avenue, North Vancouver, B.C.

The following appropriations from the Profit and Loss Account have been made for the benefit of the Staff, viz.:—

To the Officers' Widows and Orphans Fund	\$7,862 77
" Pension Fund	52,509 83
" Life Insurance Fund	2,920 00

These amounts are for the whole year and include those already set forth in the Statement to 30th May, 1914.

Donations amounting to \$24,333.33 have been made to the Canadian Patriotic Fund and the Canadian Red Cross Society. London, 18th February, 1915.

GENERAL STATEMENT OF LIABILITIES AND ASSETS AS ON 30th NOVEMBER, 1914

LIABILITIES	
Capital—20,000 shares of £50 each fully paid	\$4,866,666 66
Reserve Fund	3,017,333 33
Dividends declared and unpaid	4,931 85
Profit and Loss Account—	
Balance brought forward from 29th November, 1913	303,104 21
Dividend paid April, 1914	194,666 66
	108,437 55
Net Profit for the year ending this date after deducting all current charges and providing for bad and doubtful debts	536,576 72
	645,014 27
Dividend paid October, 1914	194,666 66
	450,347 61
Deduct:	
Transferred to Bank Premises Account	\$973 33
Transferred to Officers' Widows and Orphans Fund	7,862 77
Transferred to Officers' Life Insurance Fund ..	2,920 00
Transferred to Officers' Pension Fund	52,509 83
Canadian Patriotic Fund and Canadian Red Cross Society	24,333 33
	88,599 26
Balance available for April Dividend	361,748 35
Notes of the Bank in Circulation...	4,427,423 53
Deposits not Bearing Interest	16,967,688 36
Deposits bearing interest, including interest accrued to date	25,307,667 43
Balances due to other Banks in Canada	173,903 68
Balances due to Banks and Banking Correspondents in the United Kingdom and Foreign Countries..	314,776 56
Bills Payable	2,124,504 54
Acceptances under Letters of Credit	1,669,290 10
Liabilities and Accounts not included in the foregoing	1,369,058 91
Liability on endorsements	\$614,663 23
Liability under guarantee in respect of the Sovereign Bank of Canada	300,000 00
	\$60,604,993 30

ASSETS	
Current Coin and Bullion	\$3,083,877 86
Dominion Notes	7,538,168 87
	\$10,622,046 73
Notes of other Banks	377,653 59
Cheques on other banks	1,733,655 87
Balances due by other Banks in Canada	8,154 83
Balances due by Banks and Banking Correspondents elsewhere than in Canada	2,941,835 78
Dominion and Provincial Government Securities not exceeding market value	2,992 79
Canadian Municipal Securities and British, Foreign and Colonial Public Securities other than Canadian—(including Exchequer Bonds £310,300, at cost, and amount paid o/a Allotment, £100,000 War Loan)	1,593,131 13
Railway and other Bonds	98,615 15
Call and Short Loans in Canada on Bonds, Debentures and Stocks....	1,828,649 73
Call and Short Loans elsewhere than in Canada	2,819,999 95
Other Current Loans and Discounts in Canada (less Rebate of Interest)	26,179,121 01
Other Current Loans and Discounts elsewhere than in Canada (less Rebate of Interest)	6,057,821 94
Liabilities of Customers under Letters of Credit as per contra	1,669,290 10
Real Estate other than Bank Premises	11,993 70
Overdue Debts (estimated loss provided for)	210,588 31
Bank Premises at not more than Cost, Less Amounts Written off..	2,184,139 72
Deposit with the Canadian Minister of Finance for the purposes of the Circulation Fund—	
Dominion of Canada 3¼ per cent. Bonds £250,000 at 98.	1,192,333 33
Cash	232,248 08
	\$1,424,581 41
Deposit in Central Gold Reserves...	500,000 00
Other Assets and Accounts not included in the foregoing	340,721 56
Stock Exchange securities have been valued at or under the prices of 27th July, 1914.	\$60,604,993 30

H. B. MACKENZIE, General Manager.

E. A. HOARE, J. H. BRODIE, Directors.

We have examined the above Balance Sheet with the Books in London, and the Certified Returns from the Branches, and we report to the Shareholders that we have obtained all the information and explanations we have required and that in our opinion, the transactions of the Bank which have come under our notice have been within the powers of the Bank. As required by Section 56, Clause 19, of the Bank Act of Canada, we visited the Chief Office (Montreal) of the Bank and checked the cash and verified the securities and found that they agreed with the entries in the books of the Bank with regard thereto. We further report that, in our opinion, the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given to us and as shown by the books and returns.

N. E. WATERHOUSE, FRANK S. PRICE, Auditors.

London, 18th February, 1915.

Members of the firm of Price Waterhouse & Co., Chartered Accountants.

CANADIAN NATIONAL EXHIBITION

Toronto, August 28th—1915—September 13th

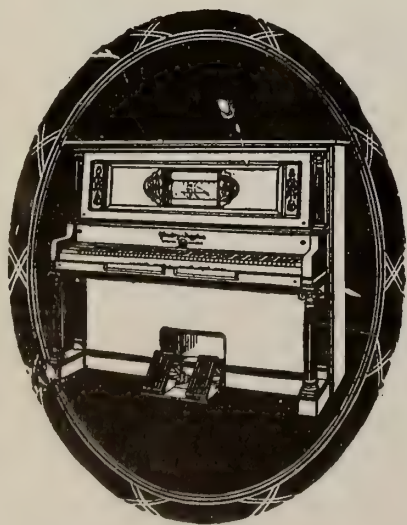
Applications for Space to Receive
Fair Consideration should be made
at the Earliest Possible Moment

FOR ALL INFORMATION WRITE

J. O. ORR, General Manager, City Hall, Toronto

Men forget business cares in the enjoyment of

Gourlay-Angelus Player-Pianos



A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

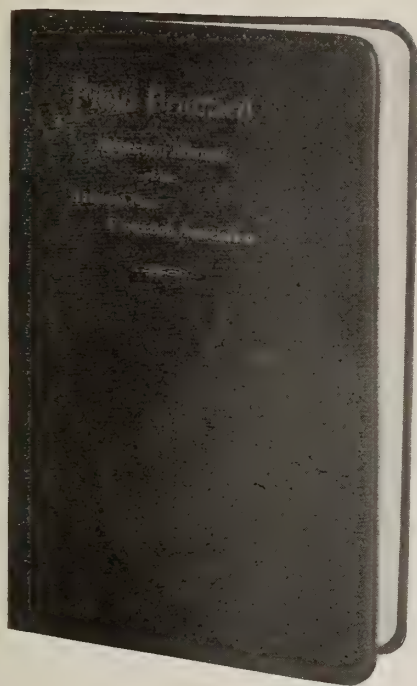
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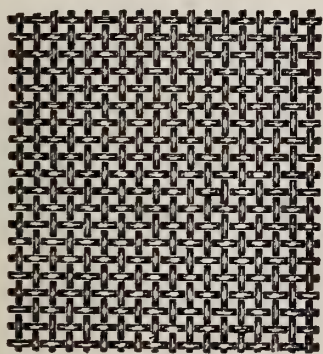
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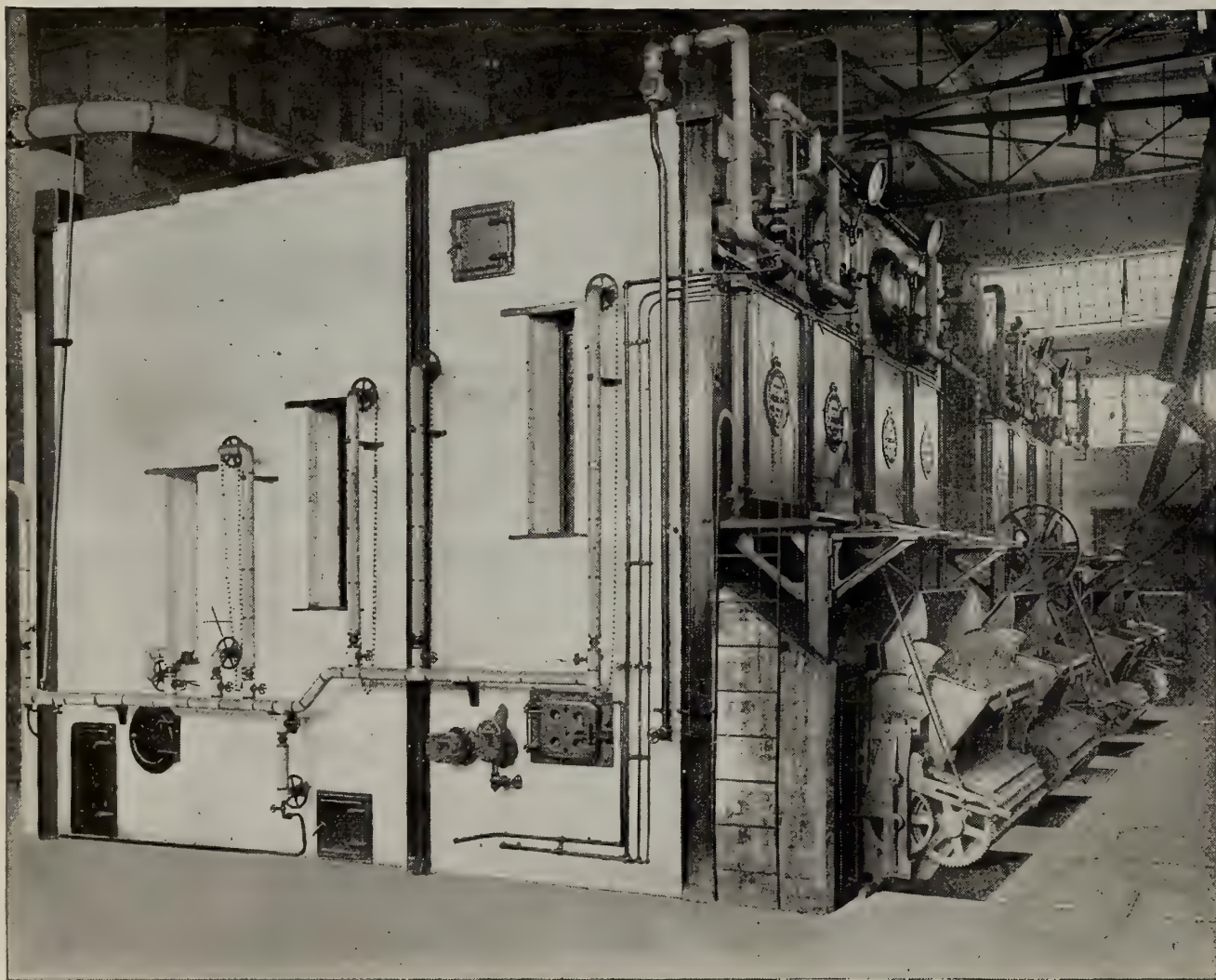


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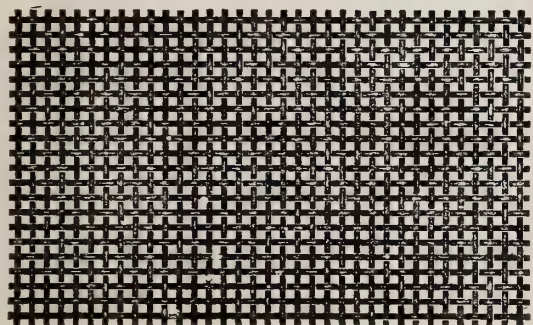
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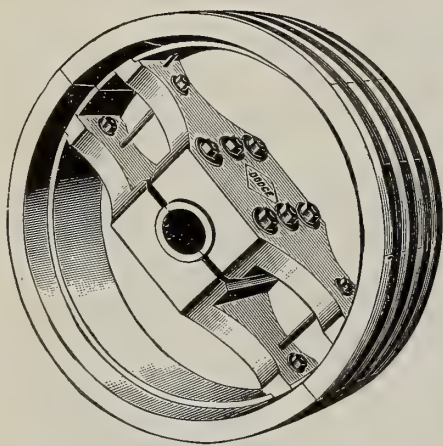
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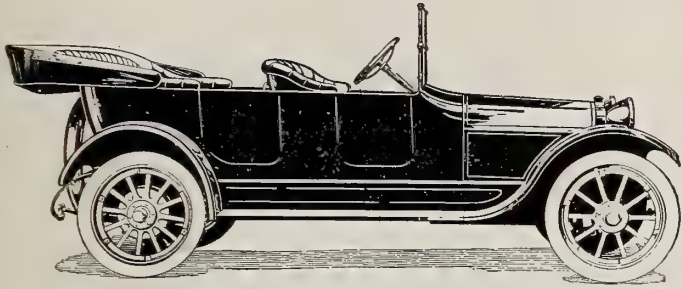
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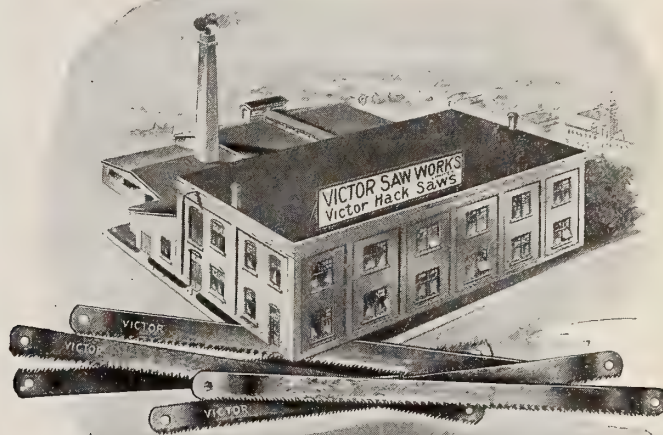
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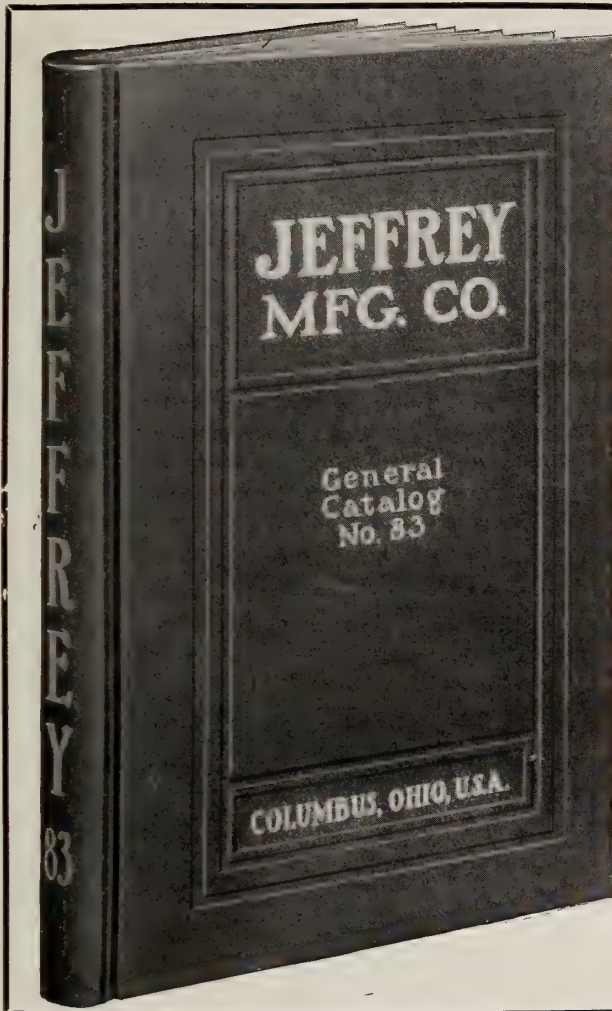
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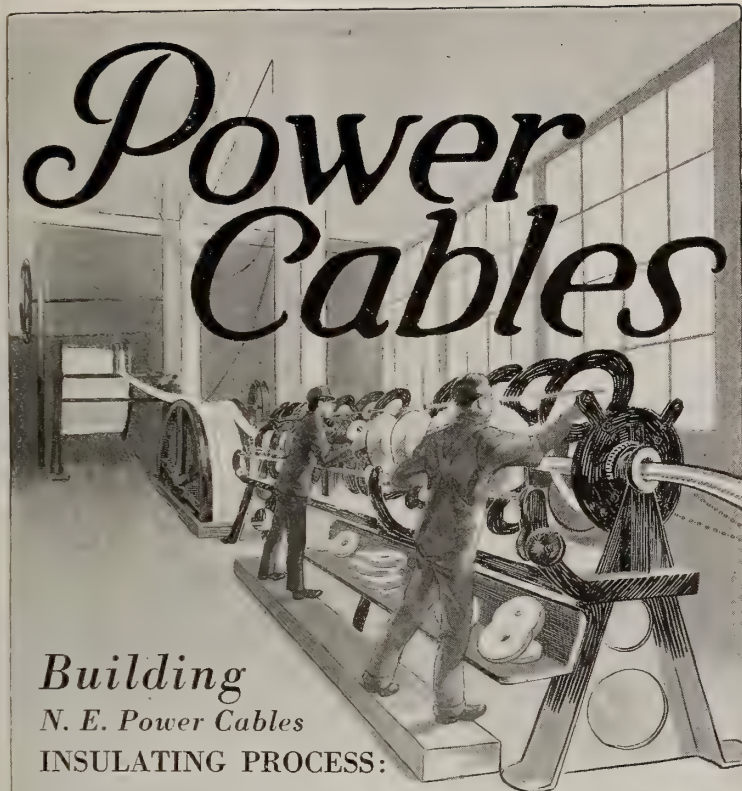
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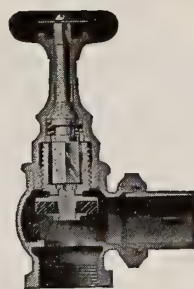
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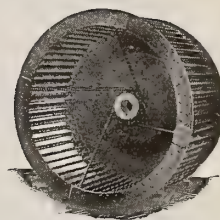
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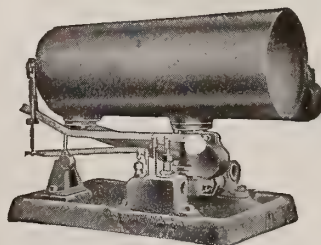
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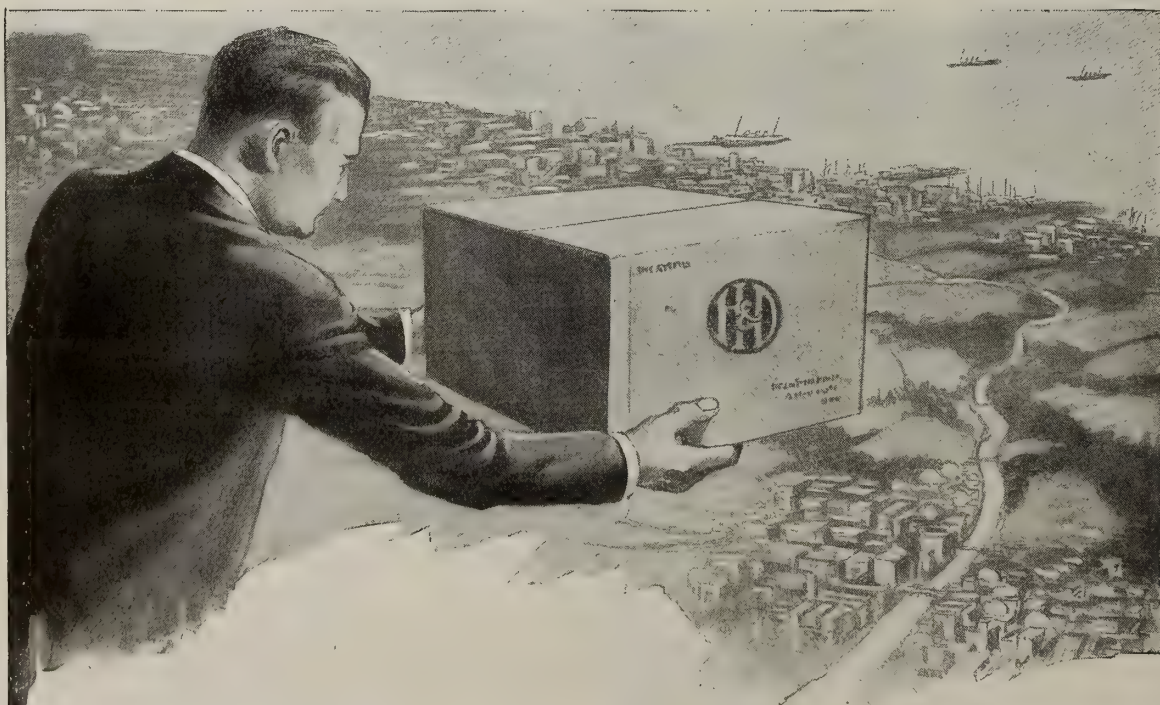
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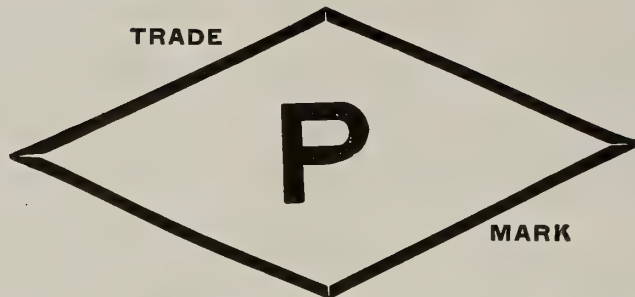


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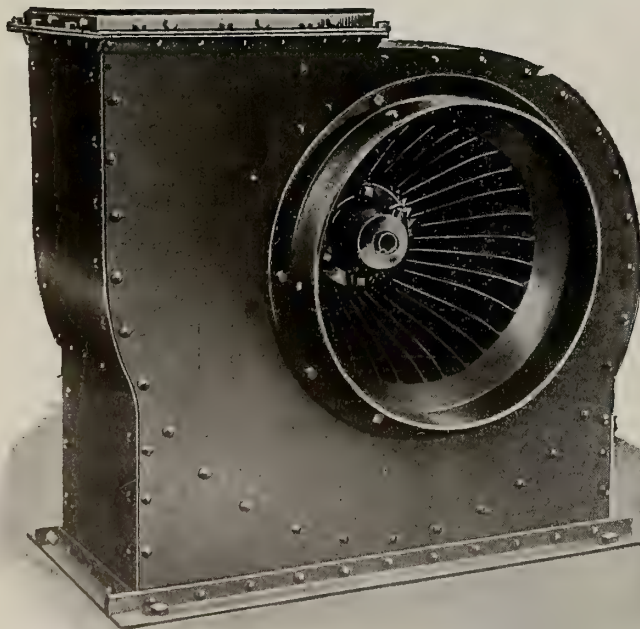
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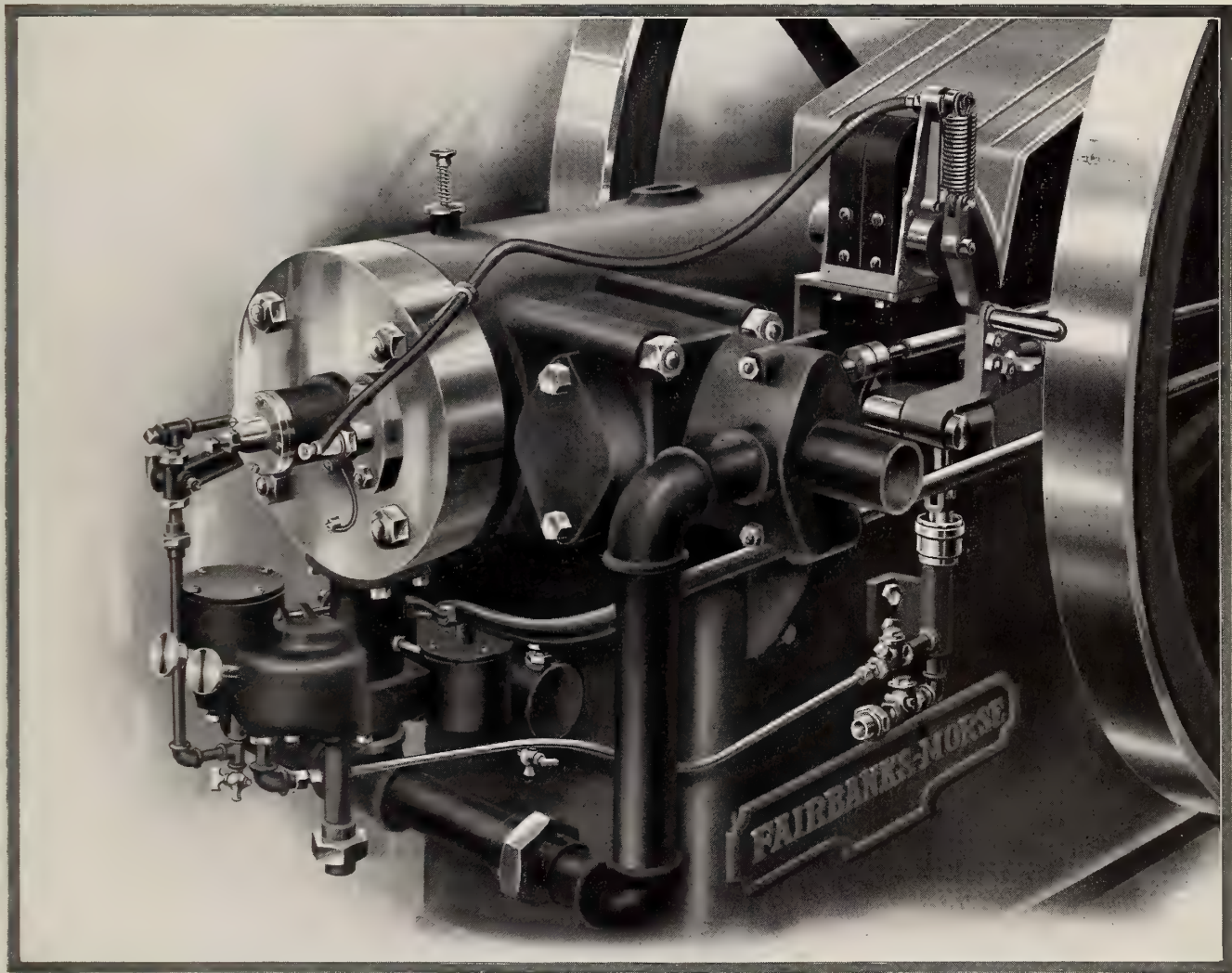
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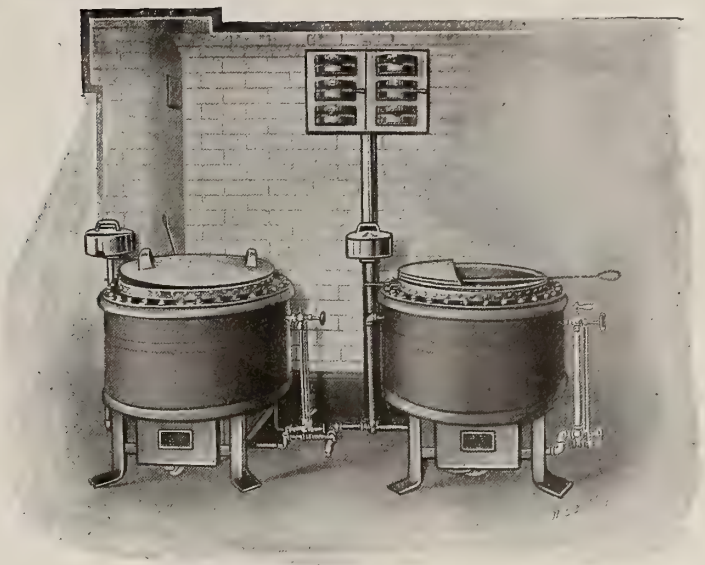
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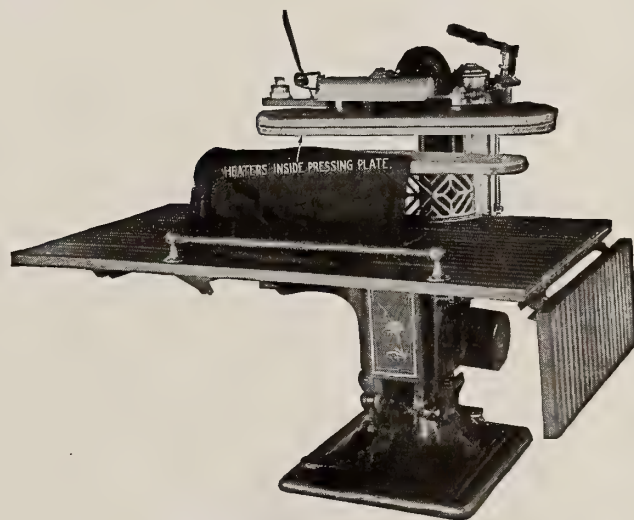
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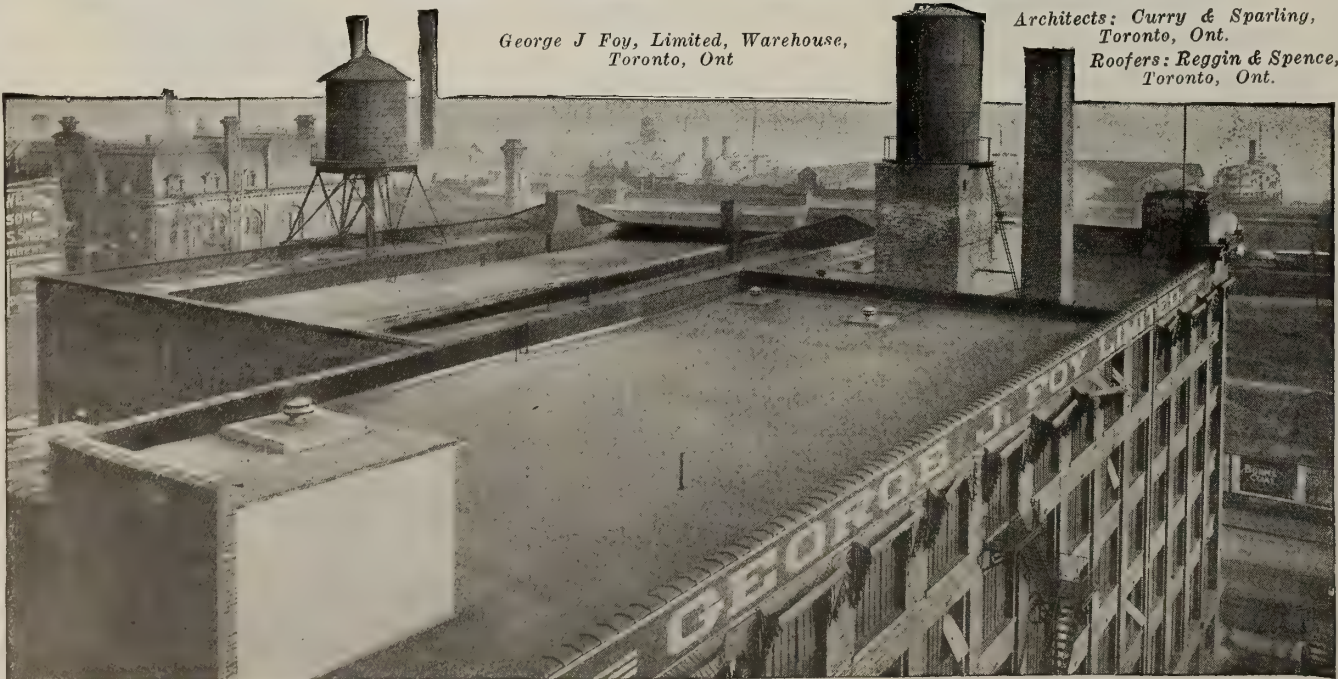
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ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

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Increase of South African Tariff.

THE duty on goods not enumerated in the General Tariff list of South Africa, that is on the majority of articles imported, has been increased from 15 to 20 per cent. British goods were allowed a rebate of 3 per cent., that is, the tariff against British goods was 12 per cent., whereas the tariff against other goods was 15 per cent. This policy has been continued, and the new tariff against British goods will be 17 per cent., compared with 20 per cent. against other goods.

This action on the part of the South African Government became necessary in order to increase the revenues of the country, upon which the war has made great demands. It is similar to the action taken by Canada and Australia, and also by other British Dominions, such as the Bahamas, where a surtax of ten per cent. has been levied on British goods; or Jamaica, where the duty against British goods has been increased from 10 to 16 $\frac{2}{3}$ per cent. Because the Canadian Government increased the duty against British goods by 5 per cent., although the tariff against other goods was increased 7 $\frac{1}{2}$ per cent., it received

a certain amount of criticism from some quarters in this country.

Those who urged that the Canadian Government was unpatriotic in increasing the tariff against British goods will now have an opportunity to make similar unfounded charges against South Africa and other British Colonies.

The Duty of Spending.

ONE of the causes of the present industrial depression is the short-sighted economy of those whose spending power has not been seriously curtailed. This fact is easily established by the bank returns showing increases in deposits. Since thousands of manufacturers', wholesalers' and retailers' employees have been thrown out of work, or have had their wages reduced, it is evident that their bank accounts must have either disappeared or decreased. Consequently the total savings bank deposits could only increase by substantial additions to the accounts of those whose incomes have escaped the general cut. Such persons are putting their surpluses into the banks instead of spending them. This means that they are going without clothes, furniture, machinery, and many other articles in order to increase their savings.

The effect becomes apparent in our imports entered for consumption as follows: year ending March 31st, 1913, \$670,000,000; year ending March 31st, 1914, \$618,000,000; year ending March 31st, 1915, \$587,000,000.

These decreases in our purchases abroad indicate that there must be correspondingly great decreases in our purchases at home. It is true that our borrowings from England have been seriously curtailed, but it is also true that they have been replaced to a certain extent by sales of bonds in the United States, which, since the outbreak of war, have amounted to about \$70,000,000. The people of Canada, after three years of great extravagance, have gone suddenly to the other extreme and have been frightened into a fit of rigid conomy. The result has been a serious decrease in manufactured output. If every man in Canada determined to do without new neckties for a year, for example, the effect would be severe to the manufacturers who make neckties. If those who have money would spend it within reasonable limits, our factories would be benefited

to an almost incredible extent, employment would be furnished to many who need it and the return to prosperity would be hastened.

Business Improvement in United States.

1. Forty thousand miners have returned to work in the coal mines of Pennsylvania.
2. The New York Stock Exchange has removed all minimum prices for trading.
3. The exports of the United States during the past four months have broken all previous records.
4. The steel output of the United States is over 50 per cent. greater than four months ago.

On these four facts the *Philadelphia Public Ledger* bases its business analysis that "all signs tend upward and virtually all business movements are forward."

In connection with the above it is encouraging to notice that the Commissioner of Currency at Washington received statements from 90 per cent. of the national bank examiners to the effect that their investigations show evidence of marked improvement in business conditions. The *New York Annalist* publishes a weekly chart based on what it calls the "fundamentals of business." These are bank clearings, building permits, pig iron production, unfilled steel orders and commercial failures. From week to week the upward movement of the chart line towards better times continues.

These and many other signs indicate that the returning optimism in the United States is founded on facts.

Unproductive Saving.

INCREASING bank deposits suggests that those whose incomes have not been affected are going without manufactured goods in order to swell their saving accounts. If they persist long enough in this policy they will not have so much to bank.

No Collapse in Western Farming.

RECORDS show that the West has never produced less than half an average crop. The worst failure of the fertile prairies was only a half failure. The only total collapses were those of the real estate bubbles.

Farmer's Advocate on Farm Problems.

IN discussing the problems of agriculture in Canada the *Farmer's Advocate* says: "It is claimed for the increased production campaign that it has served, by conference or consultation, finally and unquestionably, to diagnose the three troubles which have been sapping the strength of agriculture in this country under the headings: Labor, Money and Markets."

In regard to labor troubles the *Farmer's Advocate* suggests that farmers erect small, comfortable cottages for married hired men, claiming that where this policy has been followed in Canada the labor problem has disappeared. Recognizing that a great many farmers could not afford to build extra houses, it suggests that the Government might supply a fund for this purpose on similar conditions to those prevailing for drainage work.

"No one as yet has brought forward a practical solution for the financial problems of farming," continues the *Advocate*. "Our banking system is not favoring the farmer—far from it. Long term loans, low rates of interest, satisfactory credits are impossible with our present day financial institutions. Co-operative banking for farmers has been suggested as a remedy, and some day this may come, but at present difficulties to be overcome are almost insurmountable. It does not seem that our country is ready for, or adapted to, any of the systems which have been so successful in European countries. Then what is to be done? Either financial institutions must help or the Government must aid. Perhaps some sort of fund might be set aside to be loaned to farmers to improve their buildings or to buy feeding cattle, and to be paid back in easy payments when the cattle were sold, the interest in any case not to be high."

Dealing with the question of markets, the *Advocate* admits that it has little to suggest except that a national marketing system is needed which might be secured by the closer co-operation between commerce, transportation and farming.

Although it reviews pessimistically the work of commissions in general, the *Advocate* believes that a special commission of men who were qualified and willing to discharge their duties might go some distance towards providing solutions for the three problems under discussion.

Dealing with agricultural troubles in the order named, it seems that the *Advocate's* solution of the labor difficulty is a sound one, provided the necessary funds could be secured where they are needed. It ensures a permanence of labor reasonably satisfied with its environment. The temporary problem for the coming summer does not seem to offer much difficulty. Farmers should get all the help they need this year at reasonable rates.

There is no doubt that the banks will miss a great opportunity if they do not stand behind the "Patriotism and Production" movement. The returns, showing great increase in acreage of crops sowed last fall and this spring, prove that the farmers are making a response to the appeal for greater production. They should have financial help to carry them along until they realize on their crops; and, if this help is not forthcoming, the people of Canada will feel that the banks and loan companies are not filling the place in the national life that they are expected to fill.

Marketing should offer no special difficulties this year when Europe is crying out for farm produce. As a matter of fact the farms of Canada are not supplying all the de-

mands of the cities, towns and villages of Canada for food. When the increased European demand is added to the domestic demand the farmers should have no fear that they will have anything that they grow left on their hands unsold.

Workmen's Compensation in New York.

AN appropriation of \$500,000, which was intended to cover administrative costs of the New York Workmen's Compensation Commission for a year, has been spent in three months. The details of this extravagance will be found on the Insurance page of this issue. Wasteful administration plus high rates of compensation is fastening a heavy load on New York State manufacturers, a load which Canadian manufacturers fear will be laid on them as a result of the various systems of compensation now in effect or being introduced in the provinces of Canada.

Public Works Expenditures.

THE Dominion Government expects to spend \$32,000,000 on capital account this year. Among the appropriations appear the following for harbor improvement:

Port Arthur and Fort William	\$1,500,000
Quebec	1,234,000
Esquimalt	250,000
St. John	1,500,000
Toronto	1,000,000
Vancouver	1,000,000

It is good policy to spend money on construction during the present depression. Factories which are now closed down or on half time will be able to employ more men and to buy more raw material. Labor will be also provided for an army of construction workers. Economy should be practised rather in administration with a view to reducing current expenses than by limiting expenditures on works which will become permanent assets. In making such large grants for harbor work, the Government seems to be convinced that the effects of the war will not be detrimental to our water-borne commerce.

The "Closed Shop" in Indianapolis.

THE "closed shop" has become so great a menace to the Associated Employers of Indianapolis that they have been compelled to declare war against it in order to prevent paralysis of industry.

They have issued a pamphlet which, after dealing with the iniquities of the business agent, says:

"Every dollar spent in furtherance of 'open shop' conditions, promotes peace and prosperity. Every dollar expended on the other hand in the encouragement of 'closed

shop' conditions, retards the march of civilization and industry. The stronger the 'closed shop' is in any community, the more likely it is to attack. The more dominant professional agitators are allowed to become, the more effective will be their blow when delivered. The closed shop in the building trades invariably tends toward the 'closed shop' in other trades and industries, through the calling of sympathetic strikes, or jurisdictional disputes to enforce the use of 'union made' material. The malice aforethought back of it all is to compel the unionization of other lines of work. These conditions will increase in scope and effect, so long as the builder and owner, and his representative, the architect, insist upon a 'union labor clause,' in a building contract. Likewise, so long as this exists, the hands of the contractor will be completely tied; he cannot, if he would, free himself from the yoke of relentless union domination.

"If employers find it difficult to-day to deal through the 'business agent' with organized wage-earners, what conditions will they face if by their own acts they so discourage the individual initiative of the workers and so help to recruit the labor organizations through the closed shop, that the 'walking delegate' would absolutely control the only available supply of labor? Having denied or tolerated the denial of the individual rights of others, their own acts would bring employers to a point where, by the very force of circumstances, which they might otherwise have directed, they would be denied the right of supervision, control and direction of their own businesses."

Canadian manufacturers have realized through experience that they cannot compromise on the question of the "closed shop." The principle at stake is too great. If the walking delegate is allowed to dictate the employer knows that he might as well close his shop in the real sense and go out of business.

Canada and Russia.

THAT the Department of Trade and Commerce recognizes the vast possibilities of the Russian market for manufactured goods is shown by the recent announcement by Sir George Foster, that Mr. Just, formerly Trade Commissioner to Germany, will make a special tour of investigation in Russia. He will go, first, to Petrograd, and later to the chief cities of Eastern Russia and the Black Sea. Afterwards he will proceed through Siberia to Vladivostock, and thence to Canada by way of the Pacific. With the information which has collected he will then visit different centres in Canada for the purpose of conferring with manufacturers and other business men. He will be furnished with two assistants, who will be trade commissioners under him, permanently resident in Russia.

"Although Russia is much perturbed by the war," said Sir George Foster, "yet on account of its vast size and immense population, business goes on in great portions of that territory much as it is usually carried on. When

the war is over, we think that Russia will afford a very large field for certain manufactures and productions of Canada. Siberia itself is an immense country, much the analogue of our Northwest—quite as extensive, and producing much the same. Siberia has been rapidly filling up with immigrants from Western Russia; about six hundred thousand a year are pouring into that portion of the country, and it is on the plans of the Russian Government to develop that country with railways as rapidly as it can possibly be done. So that, both from the east and from the west of Russia, there opens up, I think, a good prospect for our people. Already some of our manufactures have found a large place in Russia. Agricultural implements to the amount of well on to two millions of dollars were exported to Russia during last year; and, although that trade is somewhat disturbed at the present time, that which has been accomplished shows what there is in the field. Then, a certain section of our manufacturing industries believe that there is a large future there for the marketing of railroad supplies of different kinds, particularly cars, and already some of our manufacturing interests have representatives in Petrograd, and are pushing business with their usual diligence.”

At the conclusion of Sir George Foster's statement, Sir Wilfrid Laurier expressed his conviction that, soon after the war is over, an enormous trade will spring up between Canada and Russia, and that probably a line of steamers will be established between Prince Rupert and Vladivostock.

If these hopes are realized, and there are strong grounds for believing that they will be realized, manufacturing in Canada, especially in the Western Provinces, will be greatly stimulated.

Canadian Trade with South America.

IN dealing with South American trade, Sir George Foster has pointed out two great difficulties which stand in the way of Canadian manufacturers who want to sell their goods to South American countries. The first is the difficulty of arranging credits, which can compete with those furnished by older countries through their admirable banking systems; and the second is the lack of direct steamship communication. He says that, when the war is over, the question of establishing a direct steamship line from Canada to South America will be considered.

A Fine Beginning.

A DEVELOPMENT of Russian-Canadian trade is anticipated by the officials of the Canadian Car and Foundry Company, Limited. As a result of negotiations between the Russian Government and Senator Nathaniel Curry, Mr. W. W. Butler, second vice-president of the company, is just returning with an order from Russia for

shrapnel and explosive shells, which may amount to \$80,000,000. If the Company's gift of prophecy is equal to its power of performance the coming Russian-Canadian trade will stagger the imagination. If only the thin end of the wedge has been inserted what will the thick end do?

Canadian Rails for United States.

“SOME criticism has followed the recent action of the Illinois Central Railroad because it placed an order for 35,000 tons of rails with the Algoma Steel Company of Canada,” says the *Manufacturers' News* of Chicago.

“The order was for open hearth rails and the price was \$27 a ton delivered at Chicago. This was \$3 a ton cheaper than prices usually quoted by American mills on the same rails.

“How much freight do the railroads of the United States receive upon rails manufactured in Canada?

“If all the railroads bought their rails in Canada because they could obtain them at \$3 a ton cheaper what would become of our working men, farmers and manufacturers?

“And what would become of our railroads?”

We do not dispute arguments set forward to encourage the purchase of home manufactures in any other country, because we are constantly using similar arguments with regard to the desirability of using our own manufactures in Canada, but we ask the *News* not to become unduly exercised because a small contract for rails has escaped to this country. Surely the *News* remembers how many million dollars' worth of rails Canada bought from the United States when we were building our trans-continental railways.

The *Wall Street Journal* also views with disfavor the following recent sales in addition to the Illinois Central order: Pere Marquette, 5,500 tons; New York Central, 3,000 tons; Hocking Valley, 4,000 tons; Toledo Terminal, 500 tons; Northern Ohio Traction, 500 tons; miscellaneous, 10,000 tons.

“Canadian roads,” says the *Journal*, “which have been subsidized by the Government, are prohibited from buying their rails from a foreign maker unless the Canadian mills are filled up. As this very rarely occurs, the United States gets very few orders of this kind.”

To refute this statement it is only necessary to consult the Customs returns for the year ending March 31st, 1914, showing Canada's purchases of rails from the United States for the year to have been \$4,901,851. During the ten months of the present year, when our mills had little to do, we purchased \$677,956 worth of rails from the United States.

When the *News* and *Journal* recall the past huge purchases of Canada in the United States, surely they can regard the present limited purchases of the United States in Canada without envy.

Patronage List Should Go.

THE patronage list is a worn-out political institution. It is a part of the iniquitous spoils system, and was first generally established on this continent by the redoubtable Andrew Jackson, Democratic President of the United States. It flourished in that country for many years, and still is far from being decadent. It has also flourished in Canada under the protection of both Liberal and Conservative Governments. The great countries of Europe are reducing its evil influence to a minimum and the tendency of the present time is to abolish it entirely. A Government, in purchasing goods, should be actuated by the same motives that govern the private purchaser. Quality, price, and the support of home industry should be the only things considered.

Made in U. S. A. Week.

THE *Hardware Age*, a journal published in the United States, gives the following description of how a great organization of women supports home products:

"The Woman's National Made in U. S. A. League, with headquarters in Washington, has issued a call to the merchants of the country asking that the first week in May be set aside for a special display and sale of merchandise made in the United States. This first May week has been designated by the league as 'Made in U. S. A.' week, and extra efforts are being put forth to secure a

nation-wide co-operation of all the retail business in the country.

"This woman's league started here some six months ago with practically every prominent woman at the capital enrolled within its membership. It now has branches in every state, with state presidents and working organizations. The aim of the league is purely patriotic—to stimulate the demand for American-made merchandise. Written pledges have been received from over 40,000 women that they will demand and buy everything, whenever possible, 'Made in U. S. A.,' and that they will urge their friends to do likewise."

A number of associations in this country have pledged themselves to buy "Made in Canada" goods, but a great opportunity lies before the women of Canada to urge a national campaign in favor of the manufacturers who give employment to their fathers, husbands, brothers and sons. Women are the buyers, but they cannot buy if the men get no wages, and if our goods are made abroad, foreigners instead of Canadians get the wages.

Bring Back the Reserves.

DOES the "Patriotism and Production" campaign include provision for leading supernumerary civil servants "back to the land" in the hope of increasing the earth's yield and of decreasing the cost of administration?

THE ANNUAL CONVENTION

Of the Canadian Manufacturers Association, Toronto, June 8th, 9th and 10th

WITH the passing of April the Canadian Manufacturers Association closes the record of another year of successful effort; with the coming of May it opens a new book upon the pages of which no one can foretell what will be written. That the past year should have had in store for the Association and its members the momentous events and changes brought about by the war was beyond the imagination even of the most discerning; in like manner the coming year may witness a reaction for our common good surpassing the hopes even of the most optimistic.

To some extent the future is in our hands. We cannot shape events, but by preparing ourselves for eventualities we can the more readily take advantage of the opportunities which will undoubtedly present themselves.

Commencing June 8th, and continuing until June 10th, the Association will be in session in Toronto for its Annual General Meeting. The gathering together of several hundred men of business, from all parts of the Dominion, can be made an occasion of enormous profit to Canada as a whole, if only the deliberations are approached in the right spirit.

Reports will necessarily have to be considered, routine business will necessarily have to be transacted, but the time for perfunctory discussion and elaborate entertainment is over. In its place we want a careful stocktaking, both of our achievements and of our resources. The past is full of useful lessons, the future of unlimited possibilities, and it is for the Association and individual members thereof to rise to the occasion and demonstrate their true worth.

The alterations soon to be made to the map of Europe will spell disaster for some, success for others. Canada is among those who will share the success. Her share will be little or large according as she shows resourcefulness in adapting herself to the changed conditions that will obtain when the war is over.

Independent action in the world struggle now in progress would probably have been fatal for France, or for Russia, or for Britain, but as Allies they will prove themselves irresistible. Canadian manufacturers, acting independently, may be overwhelmed by the rabble of trade expansionists a year hence, but as allies, and with proper organization, they can and will bring renown to themselves and prosperity to their country.

Let the Annual Convention of the C. M. A. ring with optimism and with a determination to achieve for Canada the industrial greatness that is within her grasp!



Plant of the Toronto Harbor Commissioners constructing the north slip through which the River Don enters Toronto Bay. The dock work on this slip cost \$171,000

PROGRESS OF TORONTO HARBOR WORK

By A. C. LEWIS,

Secretary, Toronto Harbor Commission.

Dominion Government will Spend \$1,000,000 and Harbor Commissioners will Spend \$1,000,000 on the Toronto Harbor Scheme during 1915

THE expenditure during 1914 of \$1,500,000 on the work planned for the development of Toronto's harbor and waterfront is an assurance to the citizens of Toronto that this great project, unlike many similar beautiful plans with which they have been acquainted in the past, is about to become an assured fact. The publication in the Fall of 1912 of plans prepared by the Harbor Commissioners for the reclamation of the Ashbridge's Bay district and the development along modern lines of the entire harbor awakened great interest not only in Toronto but throughout America generally, and particularly in the large ports both on the Great Lakes and on the ocean, where developments more or less similar to the Toronto development are also in course of preparation or of actual construction. The fact that the Toronto development has proceeded so rapidly from the appointment of the new Commissioners in the fall of 1911 up to the fall of 1914, when the Commissioners were able to report a most substantial progress on the carrying out of the work planned, will be a matter of surprise to many people who have been accustomed in the past to see such large projects move very slowly.

The plans as made public in 1912 are still fresh in the memories of the people of Toronto. The entire expenditure contemplated by the report then made public amounted to \$19,142,088.00, this sum being necessary to carry out the reclamation of Ashbridge's Bay, the construction of a large ship canal through the centre of the new industrial district, the construction of seawalls along the eastern and western city front, and the construction of large lift bridges of the most modern type over the two channel entrances to the

harbor and over the ship channel referred to. Since publication of that report the Commissioners have made public their plan for the transformation of the inner waterfront from Bathurst to Cherry streets at an approximate cost of \$5,000,000, bringing the total cost of the work now planned and under construction to \$24,190,088.91.

Division of the Cost.

The cost of the entire work was divided into three sections, the Dominion Government undertaking the expenditure of \$6,123,284.66 for the purpose of constructing the ship channel, the two seawalls and the lift bridges; the City of Toronto undertaking the expenditure of \$1,615,303.80, for the purpose of constructing various smaller bridges through the park system, the lift bridge at the foot of Cherry Street to afford a proper entrance to the district and the construction of the necessary pavements and roadways on the boulevard driveway and the payment of 6 per cent. interest annually for 40 years on a sum estimated at \$3,270,571.42 to be expended by the Harbor Commissioners in reclaiming park lands along the city front. The Harbor Commissioners are spending the balance, amounting to \$13,180,929.03, in the reclamation of the Ashbridge's Bay district, the construction of new docks in the same district, the construction of a new waterfront from Bathurst Street to Cherry Street, and the deepening of the entire harbor to an average depth of 35 feet.

The actual construction work was commenced in the Spring of 1914, and the work was continued right up to the first of January, 1915, before it was interrupted by the frost.

During the year the Government and the Harbor Commissioners expended about equal amounts on the portions of the work undertaken by these two bodies, the total expenditure being in the neighborhood of \$1,500,000. No expenditure has yet been made by the city, as the development has not reached the point where the work in which the city is interested commences.

As the result of the expenditure made in 1914, about 150 acres of land have been reclaimed in the old Ashbridge's Bay, and are now ready for occupation by industries, a railroad siding having been constructed earlier in the year for the purpose of serving this property. A fine modern concrete dock 600 x 176 feet in size has also been completed and is ready for use, and a new channel has been constructed for the purpose of carrying the waters of the Don River into the harbor. This channel is lined along both sides with permanent concrete docks, and the work had reached the point by the end of 1914, where about one month's work only was needed to complete it. The new bulkhead which is to form the west boundary of the district, was completed from the south side of this Don diversion channel south across the east end of the Bay to Fisherman's Island ready for the sand pumps to reclaim the land so enclosed during the year 1915. The substructure for the large ship channel was constructed for a length of 5,000 feet ready to be completed during 1915 by the construction of the concrete superstructure and 4,000 feet of stone-filled crib foundations for the western seawall were placed in position running from the Humber River east. Of the entire sum spent during 1914, over \$1,000,000 is represented by work which is at the present time under water, but the expenditure of a comparatively small amount this year will complete the work so commenced and show to the citizens a most substantial progress on the entire work.

The Effect Upon Industry.

What the result of this great work is going to mean to Toronto can of course only be a matter of conjecture, but that the results will be most important cannot fail to be realized by anyone who gives the matter a few minutes' consideration. Toronto in the past, with the exception of one short-lived sporadic flutter, has practically taken no steps to encourage the location of industries, while other municipalities in Canada have been spending large sums of money and offering several inducements to that end. Yet, notwithstanding Toronto's lack of interest, it is interesting to note that out of 525 branches of American industries which have been established in Canada 380 have been established in Ontario, and of this number 101 have located in Toronto.



Section of Ashbridge's Bay, Toronto, which is being reclaimed by Toronto Harbor Commission. The smooth portion which looks like water is really hard sand deposited by the hydraulic dredge.

The total amount invested by these American manufacturers in Canadian branches has been figured at \$157,500,000, or an average of \$300,000 per factory, so that the value to Toronto of the 101 factories established here approximates \$30,300,000. Toronto now possesses over 1,400 factories of different kinds, representing 176 different classes of manufactured articles out of a total of 300 different classes produced in Canada. In two years 196 new factories and 143 new warehouses have been added to the list, the value of the buildings alone of these new additions being \$7,715,595.00.

Prospects for the Future.

If Toronto has made such notable progress as a manufacturing centre in a haphazard manner and without the assistance of specialists, it is fair to assume that, with special attention paid to missionary work amongst manufacturers now needing sites and with the establishment of an industrial district, which will probably be the finest in America, Toronto will forge ahead in the years to come in a manner that will astonish its inhabitants. In the Toronto Harbor Industrial district there will be 646 acres of land available



Outline of the first concrete dock in the Toronto Harbor Industrial District. In the distance can be seen the most powerful hydraulic dredge in the world pumping sand through a pipe 4,000 feet long.



End of a pipe line through which sand is being pumped to fill in the Toronto Harbor Industrial District. Notice the heavy black discharge from the pipe.

for factories, and it has been estimated that this area will accommodate approximately 1,000 industries. The revenue from the entire development has been estimated at \$1,539,000 per year. The interest and sinking fund charge would be \$790,800 per year, leaving a balance of \$748,000 to meet other charges and expenses, and the surplus revenue, after paying expenses and providing for contemplated expenditures on the Commissioners' work is to be returned to the City Treasurer. The taxes alone on the land and buildings occupied by the factories which populate this district will be a very considerable item, amounting probably to over \$500,000 per year, while the impetus that will be given to real estate values and rental properties in the east end as a result of the thousands of employees who will have to find their homes somewhere adjacent to the district, can readily be appreciated.

The Programme for 1915.

Notwithstanding the present depression from which the business world both of Canada and the United States is suffering, the Harbor Commissioners have made the necessary financial arrangements to proceed with their work and expect to spend something over \$1,000,000 on their own portion of the work during 1915. The Government has also appropriated \$1,000,000 to continue the work commenced by it in 1914, thus assuring the expenditure of at least \$2,000,000 on the work during the present year. It is expected that the 4,000 feet of western breakwater, the foundation of which was constructed last year, will be completed this year by the construction of the concrete topping and that an additional 5,000 feet of foundation will be constructed ready for capping. The entire foundation for the docks along the sides of the ship channel will be completed and about 5,000 feet of the superstructure will be erected in place, and the Commissioners expect to reclaim an additional 150 or 200 acres of land in the industrial district as well as to reclaim a large

area of park lands on the Island and behind the seawall near the Humber River.

Monster Dredges.

In the fall of 1914 the first of a pair of hydraulic dredges was placed in operation by the Canadian Stewart Company, which holds the contract from the Harbor Commissioners for the reclamation work. This dredge is one of a pair which were built especially for the Toronto work and they are the two most powerful hydraulic dredges that have yet been constructed, as is only fitting when they are expected to handle the largest hydraulic dredging work which has yet been undertaken any place in the world. Each of these dredges is equipped with 2,380 horse-power, and in an actual running test extending over an entire month, when in operation last fall, one of them pumped an average of 20,000 cubic yards of sand and other material per day, discharging the greatest portion of it at a distance of over 4,000 feet from the point of suction. Probably the amount of material handled by one of these pumps in a day cannot be better explained than by the illustration used by the Harbor Commissioners when the dredges were first planned, at which time it was stated that one day's output from one of these dredges would cover Yonge Street from Queen Street to Bloor Street to a depth of two feet.

Both these dredges will be at work during the season of 1915 in addition to the three hydraulic dredges owned by the Harbor Commissioners, and a dozen pile drivers, derrick scows and other items of plant owned by the Commissioners and the various contractors on the work. Toronto's waterfront for the next seven or eight years promises to be an exceptionally busy spot and will undoubtedly be one of the points of interest to the citizens.

RESOLUTIONS OF RETAIL MERCHANTS.

Members of the New Brunswick branch of the Retail Merchants' Association, at a recent session in St. John, N.B., passed the following resolutions:—

To support the purchase of goods "Made in Canada," which would bear a profit now denied the retailers who handle Canadian-made goods, providing that the manufacturers did not allow the goods to be used for price-cutting by others on lines not made in Canada.

Against smuggling goods across the borders into Canada.

To provide, if possible, for the taxation on mail order firms so as to equalize the taxation paid by local retailers.

Favoring a change in the Lord's Day Act making the buyer of goods on Sunday equally liable with the vendor.

In favor of abolishing all lottery and guessing competitions, to include all premium manufacturers' products.

TORONTO BRANCH ANNUAL MEETING.

The members of Toronto Branch should keep in mind the date of the annual meeting of the Branch which is to be held this year on May 20th, at 2 o'clock p.m., in the Association Board Room, 1404 Traders Bank Building.

Reports of officers and committees covering the past year's activities will be presented and officers for the coming year elected.

Nominations for these offices will be received up till Monday, the 10th of May, at 3 p.m.

Any member of the Branch is eligible for office.

It is hoped that members will respond freely to the invitation to place in nomination the names of members who may desire to take a more active part in the work of the Association.



Main Harbor, St. John, N.B., showing entrance to new harbor at East St. John, immediately east of city peninsula. West side harbor work is on right of picture, south of C.P.R. Elevator.

HARBOR DEVELOPMENT AT ST. JOHN, NEW BRUNSWICK

By R. E. ARMSTRONG,
Secretary, St. John Board of Trade

THE sum of \$1,500,000 has been placed in the public works estimates for harbor work at the port of St. John, New Brunswick.

The exports of St. John have increased from \$9,733,554 in 1900 to over twenty-five millions in 1914. The winter season just ended has surpassed all previous records, as shown by the fact that the harbor revenues for the month of March alone exceeded those of last year by \$7,901. Owing to government prohibition, customs statistics for the season just drawing to a close have not been available, but doubtless these will be forthcoming when the war is concluded. It is the general expectation that they will far exceed any previous year.

Where Money will be Spent.

While the departmental officials here have not been fully advised as to the disposition of the appropriation just made, it is the general belief that a portion of it will be utilized in meeting expenditure in connection with the completion of the Maritime Dredging Company's contract on the western side of the harbor, in the vicinity of the new C.P.R. pier. Some reclamation and filling still remain to be done in that locality.

The major portion of the grant will be employed in connection with the comprehensive scheme of harbor development, which has been going on for several years on the eastern side of the city, at what is locally known as Courtenay Bay. This is now termed East St. John.

Early in 1912, Norton Griffiths and Co., Ltd., the English contracting firm, were awarded the contract to develop this new harbor area, and they have had a small army of men, with several ocean dredges, and other engineering plant, continuously employed since then at the task.

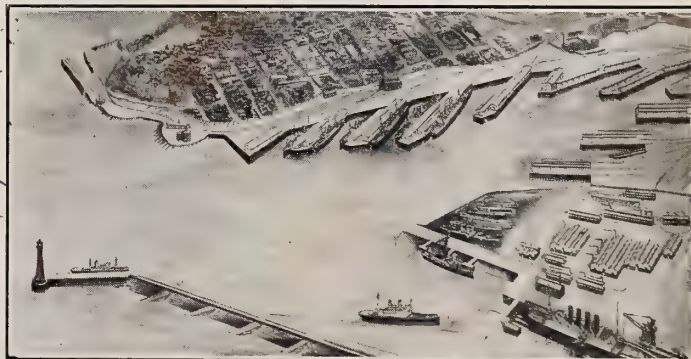
Their contract, roughly speaking, embraced the dredging of a basin 32 feet deep, with a width of about half a mile, and a length of about one-third of a mile, also the dredging to the same depth of a channel approximately one mile and a half long and 500 feet wide (the total quantity of dredging being approximately 11,000,000 cubic yards), the construction of a rubble-stone breakwater to protect this basin, of a length of 4,570 feet; the erection of two concrete piers 800 feet long, and 350 feet wide, on the western side of the basin, the exca-

vation of a dry dock site on the eastern side, the construction of a wooden pier alongside, and a reclamation scheme on both the east and west sides. The approximate estimated cost of this work was \$7,500,000.

By this comprehensive scheme, it was estimated that the capacity of the port would be more than doubled, as in addition to the piers named in the present contract, provision is made on the plans for over twenty steamer berths. The entire project will cost somewhere in the vicinity of fifteen million dollars.

Progress Since 1912.

The breakwater has been extended out its full length, but is yet to be provided with the large covering stones which are to protect its face from the ravages of the sea. The channel at present has a width of 250 feet, and with the exception of one or two points, where the contract depth has been reached, has been dredged to a depth of about ten feet at low tide. The basin—or that portion of it which has been dredged—carries the same depth, enabling vessels drawing less than ten feet of water to enter at the lowest tide. The total dredging to date has been about three and a half million cubic yards. There are three dredges—a suction and two ladder dredges—working day and night on the contract. A fourth dredge sank, but was afterwards lifted, and towed into the main harbor. The suction dredge has been taking out about 300 cubic yards



Plan of harbor development at East St. John, N.B., showing breakwater and dock system.

of material per day of twenty-four hours. One ladder dredge has been removing 9,000 yards per day, the other 7,000 yards.

On the east side of the basin, at the head of the breakwater and contiguous to the dry-dock site, about twelve acres of land have been reclaimed. The dry-dock site is in process of excavation. At one point, the contract depth has been reached. It is being blasted out of the solid rock. The original plans called for a dock 900 feet long, with a depth on the sills of 35 feet. The Minister of Public Works has given his pledge to the people of St. John that it will be extended to 1,150 feet, making it of equal size with the other large docks of Canada. Practically nothing has been done towards the pier construction which the contract calls for on the western side of the basin; the same may be said of the reclamation schemes adjacent thereto. In the vicinity of two and a half million dollars have been paid on account of the contract to the present time.

The contract, it might be added, will not expire until May, 1917.

Future of the Harbor.

It is contemplated that this new harbor—which is already skirted on its western side by the tracks of the Intercolonial

railway—will be utilized as terminals for the Intercolonial and the Grand Trunk Pacific Railway Company, the latter corporation having acquired a large area of land at the head of the harbor for a terminal site.

The Intercolonial Railway management has not yet made public its intentions with respect to the rebuilding of the grain elevator which was destroyed by fire last August, but there is a belief that the former site at the head of the present harbor alongside the Union Station, will be abandoned, and that it will be erected near the entrance of the eastern harbor, in the vicinity of the Atlantic Refinery Company's mammoth sugar refinery. The Board of Trade has recommended that the new elevator have a capacity of a million and a half bushels. A recent communication from the Minister of Railways and Canals states that erection of the elevator will probably be deferred until the close of the war.

The construction of these immense public works, taken in conjunction with the erection of a massive spandrel arch steel bridge across the reversing falls—which is the longest two-hinged arch in the world at the present time—indicates the prominent part that the port of St. John will play in the great scheme of national development which is now being worked out.



Quebec harbor improvement under way. Dam and bridge piers on St. Charles River.

IMPROVEMENTS ON QUEBEC HARBOR.

The Dominion Government have inserted in the estimates of the Public Works Department the sum of \$1,234,000 for the improvement of the harbor of Quebec city. The work will include damming of the River St. Charles by a concrete dam, measuring 1,597 feet in length, constructed on piles for the purpose of making the river navigable for one mile for trading boats which draw 15 feet of water. In the centre of the dam facing down the river are two flood gates on a level with the water which are each 450 feet long, with double gates and "reels" for drainage, allowing these flood gates to be used as dry landing places or pontoons in winter where small boats may be repaired. The gates will be built of concrete on piles, allowing two openings 8 feet in diameter, filling the locks in three minutes. Gates and valves are worked by electric power. This work was commenced in

1913. Now the part under water is finished and ready for its superstructure, about 500 feet of the dam remaining to be completed. The building of the locks will be commenced this summer and the entire work should be finished in 1917.

The deep water wharf at Levis, measuring 903 feet in front, will be equipped for the transshipment of ocean freight. The wharf now has a surface of 253,000 square feet, of which only about 20,000 square feet remain to be completed. It is built of concrete over a structure of wood filling with stone. At the lowest tide of the year the depth of the water opposite the wharf is 37 feet which permits the landing of an ocean liner.

Another part of the Quebec harbor work is the new repairing basin 1,150 feet long with entrance gates 150 feet wide.



Deep water wharf which is under construction at Levis, opposite Quebec Harbor.

TYRANNY OF UNIONS CURBED.

Employers may require employees to sever their connection with labor unions as a condition to employment, if they so desire, according to a far-reaching decision just handed down by the United States Supreme Court. The case came before the court from Kansas, where a switchman was threatened with dismissal if he did not withdraw from the Switchmen's Union. That the superintendent who made this request was within his right, is the sum of the decision, which makes unconstitutional a Kansas law known as the coercion statute. The legitimacy of labor unions was not questioned by the court.

One may become a member of a union if he desires, but "the individual," so reads the decision, "has no inherent right to join the union and still remain in the employ of one who is unwilling to employ a union man any more than the same individual has a right to join the union without the consent of that organization. Just as labor organizations have the inherent and constitutional right to deny membership to any man who will not agree that during such membership he will not accept or retain employment in the company with non-union men, and just as a union man has the constitutional right to decline proffered employment unless the employer will agree not to employ any non-union men, so the employer has the constitutional right to insist that the employee shall refrain from affiliation with the union during the term of employment. There cannot be one rule of liberty for the labor organization or its members and a different and more restrictive rule for employers."

The decision is said to affect laws in California, Colorado, Connecticut, Indiana, Kansas, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Oklahoma, Oregon, Pennsylvania, Wisconsin, and Porto Rico.—*Christian Science Sentinel*.

GIANT CAR FERRY LAUNCHED.

The "Ontario No. 2," the largest car ferry on Lake Ontario, was successfully launched on April 3rd, from the yard of the Polson Iron Works, Ltd., Toronto, where she was built for the Ontario Car Ferry Company, of Montreal. When finished, about July 1st, the ferry will run between Cobourg, Ont., and Charlotte, N.Y.

The new ferry is 313 feet long, with a breadth of 54 feet and a depth moulded of 20 feet six inches. She has a carry-

ing capacity of 30 loaded cars, each bearing 70 tons, and accommodation for 800 first-class and 200 second-class passengers. The rudder weighs 6½ tons, the tail-shafts nine tons each, and the propellers, which are twelve feet in diameter, with a 14-foot pitch, weigh 5½ tons each. Her stem forging weighs 9½ tons. She will have 5,000 indicated horse-power, with engines weighing 90 tons each. She is equipped with Clyde boilers, with Howden's system of forced draught of 200 feet working pressure.

Her bow is specially constructed for ice-breaking purposes, and when loaded she will be capable of breaking four feet of ice. She is equipped with fourteen large metallic life-boats and a similar number of life-rafts, a patent stern gate and wireless apparatus. She will have a large music and dancing room, a palm room and accommodation for a crew of forty. When completed she will be the finest and best decorated boat of her class on fresh water. Her keel was laid on November 8th, 1914.

CANADA AND THE BRITISH INDIES.

A series of articles dealing with the opportunities to sell Canadian goods in the British West Indies has been written by Mr. Watson Griffin, and is being published in the weekly reports of the Department of Trade and Commerce, Ottawa. The articles are based on a lengthy investigation into the trade conditions in the West Indies after the Canada-West Indies trade agreement of 1912. Manufacturers who are interested can secure copies by applying to the Department.

HOW OUR CITIES BURN.

The following figures, taken from a paper recently read before the Insurance Institute of Toronto, show how high the per capita fire losses of Canadian cities are compared with those of English cities:

Hamilton	\$1.88	London	\$0.46
Vancouver	4.45	Glasgow76
Calgary95	Birmingham48
Regina	3.47	Manchester55
Halifax	6.66	Sheffield57
Toronto	2.45	Leeds	1.26
Brantford	1.98	Belfast09
Winnipeg	3.88	Bristol15
London, Ont.	1.05	Edinburgh21
Saskatoon	6.85	Dublin42

OUR MANUFACTURERS AND WAR ORDERS

By H. M. P. ECKARDT

LATTERLY newspapers in Canada and the United States have been drawing attention to the vast amounts of war orders placed with manufacturing concerns in North America. If one could accept unreservedly all the reports and rumors in this connection the inevitable conclusion is that a considerable proportion of our manufacturing industry is enjoying, or is about to enjoy, a period of prosperity equivalent to that which ended in 1913. In order to arrive at the real state of affairs it is necessary to make considerable deductions from the figures and estimates which enthusiastic newspaper men allow to appear in their columns. *The New York Evening Post*, in its issue of April 14th, drew attention to the fact that some important railroad equipment companies in the neighboring country, whose plants had been idle for many months, have refused orders for guns, shells, and cartridge cases, not because of any sympathy for Germany or unwillingness to assist Britain, France and Russia, but because they did not choose to enlarge their mills or install special machinery in view of the possibility of the war ending at an early date.

It is stated that these companies have accepted all orders which they could fill without making heavy outlays for new machinery, etc. These considerations apply every bit as forcibly in Canada as in the United States. The end of the war must be taken as a very uncertain quantity. Even if our iron and steel plants are able to make good profits on these war orders they must take into consideration the possibility that if the war ends within six months they may be left with a considerable quantity of expensive new machinery on their hands for which absolutely no employment offers. Thus the war orders are something in the nature of a gamble when viewed in this light. Of course if a company has a definite contract which will occupy its machinery for a year or more, and the profits arising therefrom will suffice to meet the full cost of the alterations, installations and extensions necessitated, and leave a satisfactory surplus over and above, the case would have a different aspect; but even in such a case there might be danger of abrogation of the contract before the whole of it had been completed.

Apparently it is to such contingencies as this that an interesting paragraph in the *New York Journal of Commerce* on April 9th referred. This item stated that negotiations were then under way among the surety underwriters for the execution of bonds for several million dollars, under the terms of which advances to be made by the Russian Government to the Canadian Car and Foundry Company of Montreal would be returned to the Government if the contracts for howitzer and shrapnel shells recently placed with that company was abrogated. After mentioning that the contract involves altogether between \$80,000,000 and \$90,000,000, the news item further states that "The Russian Government is to make large cash advances to the Canadian company to enable it to expand its existing plant sufficiently to meet the requirements of the contract. The surety companies are being asked to write a bond which will guarantee the return of these advances to the Russian Government should the contract be abrogated under any of its provisions. These advances, according to the terms of the contract, begin with an initial sum of \$750,000 and are likely to run as high as \$4,000,000 or \$5,000,000 in actual money to be paid out by the Russian Government."

Assuming that this news is reliable, one would infer from it that the Canadian manufacturers in this instance avoid the risks to which the *New York Evening Post* referred in the passage quoted at the beginning of this article. It would

appear that the Russian Government takes the risk arising out of an unexpected ending of the war, and that it has endeavored to safeguard itself to a certain extent through arranging for a policy covering the contingency. If the Americans wrote such a policy doubtless they would stipulate for a high premium. The fixing of the premium rate so as to nicely cover the contingency would call for the exercise of judgment of a high order.

Presumably so far as the Canadian Car and Foundry Company and allied industries are concerned, the contracts would thus offer a reasonable surety of yielding profits sufficient to pay for any alterations and new machinery and give a satisfactory surplus besides—regardless of a possible early ending of the war. Then, of course, in the event of prolongation of the struggle beyond the end of 1915 there is the question of "repeats." If the orders are repeated the companies have the requisite machinery and equipment available, and if the money consideration remains the same as in the original contract, the profit obviously would be much larger, unless due allowance were made in the repeating order for the circumstance that the Russian Government had virtually supplied the equipment, etc., in the price paid by it for the original lot of goods.

It is to be noted that the process followed here is somewhat similar to that by which we have in recent years been importing large sums of capital from London for the purpose of building or extending our factories, etc. At the outset of the work the Car and Foundry Company would be empowered to draw bills on the agents of the Russian Government—thus there would be no need to lean upon its Canadian bankers for the funds required to place the plants in shape for beginning work on the orders. Undoubtedly the arrangement would cover drawing bills on London, and the drawing and negotiation of these bills would have a tendency to improve the exchange between Canada and the United States, in other words, the tendency would be to reduce the premium on New York funds in this market. This premium has proved an awkward and disagreeable circumstance for all Canadian manufacturers who have occasion to import fuel or raw materials from the States. The bills drawn for cost of equipment in case of the war contracts and the bills drawn later covering shipments of shells, etc., manufactured would probably be negotiated largely in New York and this would give the Canadian banks funds at the American centre on which they could draw for the purpose of meeting the requisitions made on them by parties having debts to settle or purchases to make in the United States. Of course, the prime or main reason for the abnormally high premium on New York funds is found in the war measure adopted by our Government last August in which the Minister of Finance ceased to redeem Dominion notes in gold on demand. The banks have always depended on their Dominion notes as a means of keeping exchange rates normal through exporting gold whenever the balance of payments ran decidedly against Canada. The process by which a bank needing New York funds acquired them when other banks were asking more than 5/64 of 1 per cent. for drafts, was to present Dominion notes to the Receiver General in Montreal and get gold for export. This safety valve being closed, exchange rates cannot be confined to the normal limits. However, as suggested above, the bills of exchange drawn by our manufacturers for war munitions, etc., supplemented by our exports of grain and other produce to Europe this spring will have a tendency to bring down the premium on New York funds, for the time being at any rate.

In a preceding paragraph it was mentioned that the cash advances made by the Russian Government in case of the Car and Foundry Company's contract bore a certain resemblance to our getting funds from London in past years for new construction work by means of bond issues. There is, however, a difference which is worth noting. When our industrial companies, during 1911, 1912, 1913, brought in new funds through floating bonds in London the money was obtained by means of their undertaking obligations to meet interest and principal. In other words, we simply borrowed the money and the result of several years of proceedings along this line is that we have a heavy debt to carry in Europe. This debt proves burdensome in every instance in which the plant or property acquired through creating the debt cannot be made to produce profits or earnings sufficient to take care of the relative debt.

However, the bills which our manufacturers draw on the Russian Government in this case and in others of like nature do not create new debts abroad for which we are under obligation to remit interest or principal in the form of money. Of course a debt is created whenever one of these bills is drawn on London, but the obligation is to pay it in goods not in cash. The clear understanding is that the purchase price of the goods, as paid by Russia, will liquidate the loans originally made for providing the factory equipment, all expenses in the way of raw material and manufacture, and also give our manufacturers commensurate remuneration for the work done by them.

Another advantageous point in connection with the above-mentioned financing is that it is of a nature commending itself highly to the Canadian bankers. When many of the industrial concerns of the country were enlarging plant and equipment a couple of years ago, with the idea of floating bonds in London or at home to pay for the work they requisitioned their bankers in this country for temporary loans pending sale of the new securities. Although the making of such loans lies somewhat outside of the regular scope of Canadian banking, these requests were granted in a number of cases, though probably with reluctance, inasmuch as it meant a tie-up of funds in the event of failure to put out the new bond issues. Such objections would not apply to the arrangement discussed in the foregoing paragraphs. The bankers of the manufacturing companies immediately concerned in the special war orders would not be asked to lend money to the companies. All they are asked to do is to buy the bills of exchange which might be on London or on some selected representative of the Russian Government in this country. This is quite an important consideration from the banking point of view. It is said that owing to the depression of trade and industry the idle funds of the banks have been accumulating in the last couple of months, but even if this is so the bankers would doubtless be indisposed to consider propositions involving even short loans for building or equipment, especially as they may yet hold unliquidated a few of the building loans granted before the war.

INQUIRY FOR FOLDING COTS AND CRADLES.

The Department of Trade and Commerce has received from Mr. F. Dane, Trade Commissioner at Glasgow, copies of the catalogue of a Glasgow firm who are in the habit of importing folding cribs, cots and cradles, and are desirous of making connection with any Canadian house that would be prepared to take up the business. They claim to have a considerable outlet for these goods and express a desire to see a share of the trade going to a Canadian manufacturer. These cots are made in such a manner that they fold up and the

cradles come in knock-down form so that a screw driver can do the balance of the work when received by the importer. The catalogue indicates the styles at present in use, but it is stated that these need not be followed identically. Any Canadian firm who may be interested may inspect this catalogue on application to the Department of Trade and Commerce, Ottawa. (Refer File A-1368.)

EQUIPMENT FOR AUSTRALIAN RAILWAYS.

Tender forms, specifications and drawings for equipment required by several Australian railway and tramway systems, have been forwarded by Mr. D. H. Ross, Trade Commissioner at Melbourne, Australia. These tender forms may be inspected by interested Canadian firms at the Department of Trade and Commerce, Ottawa. (Refer File No. A-1435.)

Particulars of the requirements, together with the date on which the tenders close, are briefly outlined thus:—

Victoria State Railways, Melbourne.

Contract.	Date closing.	Equipment.
	1915.	
28,711	May 5.....	9,400 incandescent electric lamps.
28,359	" 19.....	120 track transformers.
28,563	" 19.....	Electrical equipments for new bogie cars.
28,591	" 19.....	Electric signals and spare parts.
28,590	Jne. 2.....	Electric train stops.
28,621	" 2.....	Bogie trucks, wheels and axles.
28,458	" 16.....	1 15-ton electric crane and accessories as per drawing.
28,459	" 16.....	1 5-ton electric crane and accessories as per drawing.
28,616	" 16.....	1 1,000 ampere hour storage battery and accessories.
28,624	July 7.....	1 rope air compressor and accessories as per drawing.
28,625	" 7.....	5 high speed single spindle sensitive drilling machines and accessories.
28,627	" 7.....	1 double ended notching machine and accessories.
28,628	" 7.....	1 channel, angle and bar straightening machine and accessories.
28,629	" 7.....	3 high speed capstan lathes and accessories.
28,630	" 7.....	1 high speed vertical, horizontal milling and profiling machine and accessories.
28,631	" 7.....	1 pneumatic hand draft power moulding machine and accessories.
28,632	" 7.....	2 10-cwt. steam hammers and accessories.
28,633	" 7.....	1 hydraulic bending and flanging press—100 tons—and accessories.
28,634	" 7.....	2 pneumatic sand riddling and separating machines and accessories.
28,635	" 7.....	1 hydraulic pig-iron breaker and accessories.
28,636	" 7.....	1 9-in. gap toolmaker's lathe and accessories.
28,637	" 7.....	1 9-in. toolmaker's lathe and accessories.
28,684	" 7.....	2 5-ft. high speed belt driven radial drilling machines and accessories.
28,712	" 7....	14,056 lbs. high speed tool steel, assorted sizes.



THE following members and managers of Canadian manufacturing concerns now on active military service:

NOTE.—Owing to limitations of space, only members and managers of manufacturing concerns can be included in this list. INDUSTRIAL CANADA will be glad to receive additional names.

Col. Chas. Smart, Smart-Woods, Limited, Montreal.
 Col. John Gunn, Gunns, Limited, Montreal.
 Lieut.-Col. J. Bruce Payne, J. Bruce Payne, Ltd., Granby, P.Q.
 Lieut.-Col. Wm. Hendrie, Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
 Lieut.-Col. R. W. Patterson, Winnipeg Paint & Glass Co., Ltd., Winnipeg.
 Lt.-Col. Frank Howard, Brantford Emery Wheel Co., Brantford, Ont.
 Lieut.-Col. A. B. Petrie, Petrie Mfg. Co., Winnipeg.
 Lieut.-Col. G. F. C. Poussette, Assistant Secretary C. M. A., Winnipeg.
 Lieut.-Col. J. J. Carrick, Pigeon River Lumber Co., Port Arthur.
 Lieut.-Col. J. A. Currie, M.P., Imperial Steel and Wire Co., Ltd., Collingwood.
 Lt.-Col. F. C. McCordick, Frank C. McCordick, St. Catharines.
 Lt.-Col. E. W. Rathbun, The Rathbun Co., Deseronto, Ont.
 Lieut.-Col. A. J. Oliver, R. McDougall Co., Limited, Galt, Ont.
 Lieut.-Col. J. F. L. Embury, Canadian Lock Joint Pipe Co., Regina, Sask.
 Major F. J. Dingwall, D. R. Dingwall, Ltd., Winnipeg.
 Major W. R. Marshall, Standard Fuel Co., Ltd., Toronto.
 Major John McPhee, Barrie Tanning Co., Barrie.
 Major Wm. Scully, Wm. Scully, Montreal.
 Major Kimmins, E. D. Smith & Son, Ltd., Winona, Ont. (Killed in battle.)
 Major Pelly, Steel and Radiation, Ltd., Toronto.
 Major Russell Britton, Manager, Cowan & Britton, Ltd., Gananoque, Ont.
 Major W. R. Turnbull, Robert Duncan & Company, Hamilton, Ont.
 Major J. K. Bertram, The John Bertram & Sons Co., Ltd., Dundas.
 Major J. L. R. Parsons, Canadian Lock Joint Pipe Co., Regina, Sask.
 Major T. C. Irving, Moffatt-Irving Co., Toronto.
 Captain Trumbell Warren, Gutta Percha & Rubber Co., Ltd., Toronto. (Killed in battle.)
 Captain Harvey B. Evel, Evel Casket Co., Ltd., Hamilton.
 Captain W. D. Greer, Consumers Gas Co., Toronto.
 Captain J. T. Duguid, Imperial Steel and Wire Co., Ltd., Collingwood.
 Captain F. F. M. Brown, College Press, Ltd., Toronto.
 Capt. C. R. Crowe, Crowe's Iron Works, Guelph, Ont.
 Captain Smith, E. D. Smith & Son, Ltd., Winona, Ont.
 Captain F. R. Newman, Canadian Fairbanks-Morse Co., Ltd., Toronto.
 Capt. J. M. Eakins, Canada Grip Nut Co., Ltd., Montreal, Que.

Captain F. P. Duck, D. Acland & Son, Winnipeg.
 Captain G. H. Weld, Farmers Advocate, Ltd., Winnipeg.
 Captain W. L. Roblin, Winnipeg *Telegram*, Winnipeg.
 Captain R. Steacie, Smart-Woods, Ltd., Montreal.
 Captain George D. McLauchlan, McLauchlan & Sons Co., Ltd., Owen Sound, Ont.
 Capt H. C. Trenaman, Domestic Specialty Co., Limited, Hamilton, Ont.
 Capt. G. F. Grafton, Grafton & Company, Dundas, Ont.
 Lieut Harvey Cockshutt, Cockshutt Plow Co., Brantford.
 Lieut Norman V. Cliff, Toronto Salt Works, Toronto.
 Lieutenant C. H. Ackerman, B. F. Ackerman, Son & Co., Peterboro.
 Lieut K. E. Drinkwater, A. B. See Electric Elevator Co. of Canada, Ltd., Montreal.
 Lieut T. E. Ryder, Canadian Fairbanks-Morse Co., Ltd., St. John, N.B.
 Lieut. J. V. Young, Hamilton Cotton Co., Ltd., Hamilton, Ont.
 Lieut. W. L. McIntosh, Canon Lake Lumber Co., Winnipeg.
 Lieut W. S. Drewry, E. L. Drewry, Ltd., Winnipeg.
 Lieut G. H. Saltmarsh, Metallic Roofing Co., Winnipeg.
 Lieut Wm. Martin, Jr., Manitoba Gypsum Co., Winnipeg.
 Lieut. B. M. Green, Smart-Woods, Ltd., Montreal.
 Lieut. Jack Woods, Smart-Woods, Ltd., Montreal.
 Lieut. Lacey, Steel and Radiation, Ltd., Toronto.
 Lieut. Garrett, Steel and Radiation, Ltd., Toronto.
 Lieut. E. C. H. Moore, Coleman Baking Powder Co., Ltd., Brockville, Ont.
 Lieut. Ian Hendrie, Hamilton Bridge Works, Limited, Hamilton, Ont.
 Lieut. Geo. C. Wright, E. T. Wright Co., Limited, Hamilton, Ont.
 Lieut. W. H. McLaren, McLaren's Limited, Hamilton, Ont.
 Lieut. H. C. Hatch, Canada Steel Goods Co., Limited, Hamilton, Ont.
 Lieut. John Galt, Jr., Blue Ribbon, Limited, Winnipeg, Manitoba.
 Lieut. R. G. Hutchinson, International Harvester Co., of Canada, Ltd., Calgary, Alta.

Sergeant Harold Rolph, Rolph and Clark, Ltd., Toronto.

Corporal A. R. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Corporal Stewart L. Young, Young-Thomas Soap Company, Regina, Sask.

Pte. Murton Rugg, E. W. Rugg Co., Winnipeg.

Arthur H. Coles, Edmonton Law Stationers, Ltd., Edmonton.

Pte. A. C. Bertram, The John Bertram & Sons Co., Ltd., Dundas.

Pte. Alex. G. Rosamond, Rosamond Woolen Co., Almonte, Ont.
Gunner Arnold M. Thurston, Second Contingent, C.E.F., formerly on Staff of Tariff Dept., C.M.A.



MR. SLATER GOES HOME TO ENLIST.

Mr. W. H. Slater, manager of the Willis-Faber Company of Ontario, Limited, which conducts the Insurance Department of the Canadian Manufacturers Association, is going home to England to enlist. Mr. Slater was formerly a member of the Legion of Frontiersmen and also the Southern Rhodesia Mounted Volunteers.

EMBARGO ON EXPORTS FROM CANADA

EFFECTIVE ON AND FROM APRIL 30th, 1915

Canadian Exporters Must Not Ship a Large Number of Articles to Countries other than those Stipulated by the Government

AN embargo has been laid against the exportation of the following goods from Canada on and after April 30th, 1915, by an Order-in-Council dated April 27th, 1915. Hereafter, while this order stands, Canadian exporters must not send to countries, other than those stipulated, any of the enumerated articles unless a special license is granted by the Government:

NOTE TO SHIPPERS.—As to these prohibited exports Customs Officers are instructed as follows:—

(1) *In regard to goods permitted to be exported to the United Kingdom, when shipped via the United States, the bills of lading must be made out to specified consignees in the United Kingdom before the goods are permitted to cross the frontier.*

(2) *In regard to shipments exported to Foreign Countries, through the United States, a license or dispensation from the Department of Customs, Ottawa, must be delivered to the Customs Officer at the port of exit from Canada before exportation is permitted.*

TO THE UNITED KINGDOM AND BRITISH POSSESSIONS

The following goods can be exported from Canada only to the United Kingdom, British possessions and protectorates:

Aeroplanes, airships, balloons and aircraft, of all kinds, and their component parts, together with accessories and articles recognizable as intended for use in connection with aeroplanes, airships, balloons, and aircraft, including: gold beaters' skin, shantung silk in the piece; flax fabric suitable for aeroplanes; non-inflammable "celluloid" sheet (or similar transparent material non-soluble in lubricating oil, petrol or water), aeroplane dope; high tensile steel tubes; aeroplane instruments (aneroids, barographs, revolution indicators) aeroplane turnbuckles; steel stampings; magnetos; aeroplane engines and parts; amyl acetate; aceto-celluloses; trephenyl phosphate;

Animals, pack, saddle and draught, suitable for use in war; Cannon and other ordnance and machine guns, and parts thereof;

Carbons, suitable for searchlights;

Carriages and mountings for cannon and other ordnance, and for machine guns and parts thereof;

Cartridges, charges of all kinds, and their component parts;

Chemicals, drugs, dyes and dye stuffs, medicinal and pharmaceutical preparations, and tanning extracts, namely:

Acetone;

Acetylsalicylic acid (aspirin);

Ammonia and its salts, whether simple or compound;

Ammonia liquor;

Ammonia nitrate, perchlorate and sulphocyanide;

Antipyrine (phenazone);

Anti-tetanus serum;

Barium chlorate;

Belladonna and its preparations and alkaloids;

Calcium acetate and all other metallic acetates;

Calcium nitrate;

Cantharides and its preparations;

Carbolic acid;

Chloral and its preparations, including chloramid;

Chloride of tin;

Coal tar distillation products, namely, benzol and cresol and the fractions of the distillation products of coal tar between benzol and cresol;

Coal tar products for use in dye manufacture, including aniline oil and aniline salt;

Compounds of aniline;

Collodion;

Copper iodide;

Cresol, all preparations of (including cresylic acid) and nitro-cresol (except saponified cresol);

Cyanamide;

Diethylbarbituric acid (veronal) and veronal sodium;

Dimethylaniline;

Dyes and dyestuffs manufactured from coal tar products;

Emetin and its salts;

Ergot of rye, not including liquid extract or other medicinal preparations of ergot;

Eucaïne hydrochlor;

Gentian and its preparations;

Henbane and its preparations;

Hydroquinone;

Indigo, natural;

Ipecacuanha root;

Methylaniline;

Neo-salvarsan;

Nitric acid;

Nitrotoluol;

Novocain;

Opium and its preparations and alkaloids;

Paraffin, liquid medicinal;

Paraformaldehyde and trioxymethylene;

"Peptone Witte";

Peroxide of manganese;

Phenacetin;

Picric acid and its components;

Potash salts, namely:

Chlorate;

Cyanide;

Nitrate (saltpetre);

Permanganate;

Protargol, not including silver proteinate;

Prussiate of soda;

Saccharin (including "saxin");

Salicylic acid, salicylate of soda, and methyl salicylate;

Salol;

Salvarsan;

Santonin and its preparations;

Sodium chlorate and perchlorate;

Sulphonal;

Sulphur;

Sulphuric acid;

Tanning substances of all kinds:

Chestnut extract;

Oakwood extract;

Thorium nitrate; thorium oxide, and other salts of thorium;

Thymol and its preparations:

Trional;

Valonia;

Compasses, other than ships' compasses;

Cotton waste of all descriptions;

Explosives of all kinds;

Field glasses and telescopes;

Firearms, rifled, of all kinds, and their component parts;

Glass for optical instruments;

Goat skins, dressed;

Grindery, the following articles of, used in the making of boots and shoes:

Brass rivets, for use by hand or machine;

Cutlery studs, for use by hand or machine;

Heel attaching pins, for use by hand or machine;

Lasting tacks or rivets, for use by hand or machine;

Steel bills, for use by hand or machine;

Heel tips;

Heel tip nails;

Hobnails of all descriptions;

Protector studs;

Screwing wire;

Harness and saddlery which can be used for military purposes;

Heliographs;

Hemp, other than Manilla hemp;

Hosiery needles;

Khaki woollen cloth;

Periscopes;

Projectiles of all kinds and their component parts;

Range finders and parts thereof;

Silk cloth, silk braid, silk thread, suitable for cartridges;

Silk noils;

Spirits of a strength of not less than 43 degrees above proof;

Swords, bayonets and other arms (not being firearms) and parts thereof;

Wood, namely: Ash three-ply wood; walnut wood;

Accoutrements, namely, web equipment, leather belts, leather bandoliers, leather pouches, other leather articles of personal equipment manufactured for military purposes;

Blankets, colored, exceeding $3\frac{1}{2}$ lbs. in weight, known as "woollen" blankets;

Boots, heavy, for men;

Camp equipment, articles of, including tents and their component parts, ovens, camp kettles, buckets, lanterns, and horse rugs;

Carts, two-wheeled, capable of carrying 15 cwt. or over, and their distinctive component parts;

Chemicals, drugs, medicinal and pharmaceutical preparations;

Acetanilide;

Aconite and its preparations and alkaloids;

Alcohol, methylic;

Ammonia, liquefied;

Antimony, sulphides and oxides of;

Benzoic acid (synthetic) and benzoates;

Bromine and alkaline bromides;

Coca and its preparations and alkaloids;

Copper, suboxide of;

Copper sulphate;

Cresol (saponified);

Formic aldehyde;

Fulminate of mercury;

Glycerine, crude and refined;

Hexamethylene tetramin (urotropin) and its preparations;

Hydrobromic acid;

Potash, caustic;

Potash salts, namely:

Bicarbonate;

Bichromate;

Carbonate;

Chloride;

Chrome alum;

Metabisulphite;

Prussiate;

Sulphate (including Kainit);

Sodium nitrate;

Tartaric acid and alkaline tartrates;

Urea and its compounds;

Zinc sulphate;

Coal sacks;

Draw plates, jewelled, for drawing steel wire, and diamonds prepared for use therein;

Ferro alloy, including:

Ferro-chrome;

Ferro-manganese;

Ferro-molybdenum;

Ferro-nickel;

Ferro-titanium;

Ferro-tungsten;

Ferro-vanadium;

Spiegeleisen;

Ferro-silicon;

Graphite, including foundry (moulding) plumbago and plumbago for lubrication;

Hemp, the following manufactures of:

Cloth;

Cordage and twine, not including cordage or twine of Manilla hemp or reaper or binder twine;

Horse shoes;

Jute, raw;

Metals and ores, the following, viz.:

Alumina, and salts of alumina;

Aluminium and alloys of aluminium;

Antimony and alloys of antimony;

Bauxite;

Chromite ore;

Cobalt;

Copper unwrought and part wrought, all kinds, including alloys of copper (such as brass, gun metal, naval brass and delta metal, phosphor copper and phosphor bronze), copper and brass sheets, circles, slabs, bars, pipes, ingots, scrap, rods, plates, solid drawn tubes, condenser plates, copper wire, brass wire bronze wire, solder containing copper;

Lead, pig, sheet or pipe (including solder containing lead);

Lead ore;

Manganese and manganese ore;

Mercury;

Molybdenum and molybdenite;

Scheelite;

Selenium;

Tin and tin ore;

Tungsten;

Vanadium;

Wolframite;

Zinc and zinc ore (including zinc ashes, spelter, spelter dross, and zinc sheets);

Mineral jellies;

Mines and parts thereof;

Oil, blast furnace (except creosote and creosote oil);

Oil fuel, shale;

Oil, mineral lubricating (including mineral lubricating grease and lubricating oil composed of mineral and other oils);

Oils and fats, all vegetable and animal (other than lin-

seed oil, boiled and unboiled, unmixed with other oil, and not including essential oils);

Oil, whale, namely, train, blubber, spermo or head matter, and seal oil, shark oil, and Japan fish oil;

Oleaginous nuts, seeds and products, the following, namely:

Castor beans;
Cocoanuts;
Copra;
Cotton seed;
Ground nuts (Arachides);
Linseed;
Palm kernels;
Rape seed;
Sesame seed;
Soya beans;

Petroleum, fuel oil (including turpentine substitute and paraffin oil);

Petroleum, gas oil;
Petroleum spirit and motor spirit (including shell spirit);
Pigskins, dressed or undressed;
Portable forges;
Rope (steel wire) and hawsers;

Rubber (including raw, waste and reclaimed rubber, solutions containing rubber, jellies containing rubber, or any other preparations containing rubber), and goods made wholly of rubber;

Searchlights;
Sheepskins, tanned;
Sheepskins, whether woolled or not;

Signalling lamps of all kinds capable of being used for signalling Morse or other code;

Submarine sound signalling apparatus;

Surgical bandages and dressing (including buttercloth);

Telephone sets and parts thereof, field service telegraph and telephone cable;

Torpedo nets;

Torpedo tubes;

Torpedos and parts thereof;

Turpentine (oil and spirit);

Vessels, boats and craft of all kinds; floating docks and their distinctive component parts;

Wagons, four-wheeled, capable of carrying one ton and over and their distinctive component parts;

Uniform clothing and military equipment;

Wire, barbed, and galvanized wire, and implements for fixing and cutting the same (but not including galvanized wire netting);

Wire, steel, of all kinds;

Wool, raw (sheep's and lamb's);

Wool tops;

Wool noils;

Wool waste;

Woollen rags, applicable to other uses than manure, pulled or not;

Woollen and worsted cloth, suitable for uniform clothing, not including women's dress stuffs or cloth with pattern;

Woollen and worsted yarns;

Woollen jerseys, cardigan jackets, woollen gloves, woollen socks, and men's woollen underwear of all kinds.

Goods to be exported only to United Kingdom, British Possessions, France, Russia, Japan and the United States:

NOTE TO SHIPPERS.—*Customs Officers at the port of exit in Canada are instructed, before allowing exportations, to see that bills of lading for shipments of the following goods to the United States are made out to specified consignees and are marked, "for consumption in the United States only."*

THE exportation of the following goods are prohibited to all destinations other than the United Kingdom, British Possessions and Protectorates, France, Russia (except Baltic ports), Japan, United States, when for consumption in United States only, or shipped to specified consignees in United Kingdom via United States, or exported via United States, under license or dispensation from Canada, viz.:

Forage and food for animals, namely:

Beans (not including haricot beans);
Brewers' and distillers' grains;
Brewers' dried yeast;
Buckwheat;

Cakes and meals, the following, namely:

Biscuit meal;
Calf meal;
Cocoanut or poonac cake;
Compound cakes and meal;
Cottonseed cake, decorticated and undecorticated, and cottonseed meal;
Fishmeal and concentrated fish;
Gluten meal or gluten feed;
Ground nut cake and meal;
Husk meal;
Linseed cake and meal;
Locust bean meal;
Maize germ meal;
Maize meal;
Meat meal;
Palmnut cake and meal;
Rapeseed cake and meal;

Soya bean cake and meal;

Dari;

Hay;

Fusel oil (amyl alcohol);

Hempseed;

Lentils;

Maize;

Malt dust, culms, sprouts or combings;

Millet;

Offals of corn and grain, including:

Bran and pollard;

Mill dust and screenings of all kinds;

Rice meal (or bran) and dust;

Sharps and middlings;

Patent and proprietary cattle foods of all kinds;

Peas, except tinned and bottled peas, and peas packed in cardboard boxes and similar receptacles;

Straw;

Provisions and victuals which may be used as food for man, namely:

Animals, living, for food;

Barley and oats, including barley meal and pearled barley, and oatmeal;

Butter;

Cheese;

Eggs and shells;

Lard and imitation lard;

Malt;

Sugar, refined and candy;

Sugar, unrefined;

Wheat, wheat flour and wheat meal;
 Meat, namely, beef and mutton, fresh or refrigerated;
 Hides of cattle, buffaloes and horses, and calf and goat skins;
 Leather, undressed, or dressed, suitable for saddlery, or for harness, or for military boots, or for military clothing;

Wood, namely:
 Ash;
 Spruce;
 Coal;
 Mica and micanite;
 Flax, raw; flax seed;
 Paraffin wax.

EUROPEAN, MEDITERRANEAN AND BLACK SEA PORTS

The exportation of the following goods is prohibited to all foreign ports in Europe and on the Mediterranean and Black Seas, other than those of France, Russia (except Baltic ports), Belgium, Spain, and Portugal:—

Armour plates, armour quality castings, and similar protective material:

Asbestos;
 Bags and sacks of all kinds (not including paper bags);
 Bicycles and their distinctive component parts;
 Bladders, casings, and sausage skins;
 Camphor;
 Chemicals, drugs, etc.—
 Bismuth and its salts;
 Iodine and its preparations and compounds;
 Mercury, salts and preparations of;
 Nux Vomica and its alkaloids and preparations;
 Chronometers and all kinds of nautical instruments;
 Compasses for ships, and parts thereof, including fittings such as binnacles;
 Firearms, unrifled, for sporting purposes;
 Flaxen canvas, namely:—
 Hammock canvas;
 Kitbag canvas;
 Merchant Navy canvas;
 Royal Navy canvas;
 Tent canvas

Implements and apparatus designed exclusively for the manufacture of munitions of war, for the manufacture or repair of arms or of war material for use on land and sea, namely, plant for cordite and ammunition factories, viz:—

Cordite presses;
 Dies for cartridge cases;
 Gauges for shells or cartridges;
 Incorporators;
 Lapping machines;
 Rifling machines;
 Wire-winding machines;

India-rubber, sheet, vulcanized;

Intrenching tools and intrenching implements, namely, pick-axes and grubbers, whether of combination pattern or otherwise; spades and shovels of all descriptions; helms and handles for pick-axes, grubbers, spades and shovels; and machinery for trenching and ditching;

Jute yarns;

Jute piece goods;

Linen close canvas;

Linen duck cloth;

Mahogany;

Mess tins, and water bottles for military use;

Metals and ores, the following, viz:—

Copper ore;

Iron ore;

Iron, haematite pig;

Iron pyrites;

Nickel and nickel ore;

Motor vehicles of all kinds, including motor bicycles, and their distinctive component parts and accessories, tires for motor vehicles and for cycles, together with articles or mater-

ials especially adapted for use in the manufacture or repair of tires;

Packings, engine and boiler (including slagwool);

Provisions and victuals which may be used as food for man, viz:—

Compressed and desiccated soups;

Cocoa powder;

Herrings, cured or salted, in barrels or cases, including dry salted herrings and herrings in brine;

Tinned meats and extract of meat;

Railway material, both fixed and rolling stock;

Rosin;

Seeds, clover and grass;

Shipbuilding materials, namely:

Boiler tubes;

Condenser tubes;

Iron and steel castings and forgings for hulls and machinery of ships;

Iron and steel plates and sectional materials for shipbuilding;

Marine engines and parts thereof;

Ships' auxiliary machinery;

Sounding machines and gear;

Telegraphs, wireless telegraphs, and telephones, materials for.

Exports prohibited to Denmark, Netherlands and Sweden

The export of the following articles is hereby prohibited to ports in Denmark, the Netherlands and Sweden:—

Tin plates; including tin boxes and tin canisters for food packing.

TRADE RETURNS.

The statement of Canadian trade shows a total for the fiscal year ended March 31st, 1915, of \$1,078,173,240, as compared with \$1,112,562,107 for the previous year, a good showing in view of the dislocation of the world's trade by the war and the unfavorable economic conditions which prevailed before the war.

In the last month of the year a decided improvement was noticeable, the trade total being \$110,540,998, as against \$92,887,053 in March, 1914.

The exports of manufactures increased from \$6,239,290 to \$15,600,700; agriculture from \$6,512,546 to \$12,438,145, and animals and products from \$3,202,060 to \$5,471,249.

CARE OF BELTING IN MANUFACTURING PLANTS.

To get the highest efficiency in power transmission has been and is still a problem confronting the manufacturer of all kinds of product. Leather belting and gears are the best known power transmitting agents. Although during the last decade other transmission mediums have been placed on the market, leather belting still maintains a leading position. It has demonstrated its ability to stand more abuse and high speed and come out alive than any other means of power transmission.—*Power House.*

PULP IN BRITAIN.

Wood pulp imported into Great Britain is divided between chemical and mechanical varieties, according to Mr. Claud Dyer, Trade Commissioner at Leeds. The large proportion of the chemical pulp is dry and unbleached, although small quantities of bleached dry pulp and also wet chemical pulp are received. The reports also requests for Canadian binder twine.

SPECIAL LUMBER COMMISSIONER.

Sir George Foster has announced that Mr. McMillan, who was formerly connected with the Forestry Department in British Columbia, has been appointed as special commissioner for the purpose of finding a market for Western Canada lumber. He will go from British Columbia to Japan, China, India, Australia and New Zealand, South Africa, South America and Great Britain.

IN THE WEST INDIES.

Openings for Canadian manufacturers in British West Indies are reported by Mr. E. H. S. Flood, Trade Commissioner of the Barbados. Among articles which he says might be sold are: Bags, trunks, valises, boots and shoes, brooms and brushes, carriages, bicycles, motor cars, cement, cordage and twine, axes, hammers, general artisans' tools, wire fencing, wire nails, carriage stock, paints and varnishes, plate and plated ware, paper and soap.

FRENCH REQUIREMENTS FOR CANNED GOODS.

The Hon. Philippe Roy, the Canadian Commissioner General at Paris, has forwarded particulars regarding an inquiry from an important French source as to the possibility of purchasing large quantities of beans (white and green) in Canada. The inquirer is also anxious to get into touch with packers of canned meat, poultry, fruit, vegetables, fish, extracts of meat, soup, jams, manufacturers of dry biscuits and cheese. Although not at present in a position to buy outright, he would be willing to accept the agency of Canadian exporters and to receive orders on their behalf after coming to an arrangement as to terms. The name and address of the inquirer in question may be had on application to the Department of Trade and Commerce, Ottawa. (Refer File No. A 192.)

POSSIBLE MINERAL EXPORT FROM CANADA.

Mr. W. L. Griffith, the secretary to the High Commissioner for Canada, 17 Victoria Street, London, S.W., has forwarded a copy of a letter from a firm of varnish and japan manufacturers, which refers to the market in the United Kingdom for barium sulphate and sulphate of strontium. It is pointed out that the consumption of barium sulphate in Great Britain will probably run into anywhere between fifty to a hundred tons per annum, with prices ranging from 40s. to 60s. and 70s. per ton. The material should be supplied in a very finely powdered state, and the whiter the quality the higher the price. It should be packed in double sacks, or casks, so as to be transported without getting wet, it being an article that absorbs moisture fairly easily.

If strontium sulphate can be mined in the same way as the sulphate of barium, the one would very soon take the place of the other, and as the bulk of the supplies used in England have up to the outbreak of the war come from Germany, there should be an opportunity for Canadian suppliers to obtain a share of the trade. The firm referred to offers

to provide samples of the current qualities of sulphate of barium that are now used in England, should any Canadian producer care to follow up the matter. The name and address of this firm may be had on application to the Department of Trade and Commerce, Ottawa. (Refer to File No. A-1098.)

NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated for manufacturing purposes:

Ontario Flax Co., Ltd., \$40,000, Toronto, Ont.
McCormick Mfg. & Supply Co., Ltd., \$40,000, Welland, Ont.
Metal Drawing Co., Ltd., \$50,000, St. Catharines, Ont.
Canadian Regal Motor Co., Ltd., \$100,000, Berlin, Ont.
Canada Steam Furnaces, Ltd., \$150,000, Toronto, Ont.
The Rideau Power Co., Ltd., \$80,000, Merrickville, Ont.
Canadian Horse Shoe Co., Ltd., \$300,000, Hamilton, Ont.
Sudbury Flour Mills, Ltd., \$1,000,000, Ottawa, Ont.
Bermite Explosives, Ltd., \$200,000, Montreal, Que.
The Guelph Tire & Rubber Co., Ltd., \$350,000, Guelph Ont.
Canadian Wallboard Co., Ltd., \$50,000, Toronto, Ont.
Canada Foreign Trading Co., Ltd., \$250,000, Montreal, Que.
New Brunswick Canneries Co., Ltd., \$10,000, St. Andrews, N.B.

The Colonial Shirt Co., Ltd., \$25,000, Berlin, Ont.
Shawinigan Electro-Metals Co., Ltd., \$50,000, Montreal, Que.

The Diebel Furniture Co., Ltd., \$50,000, Stratford, Ont.
American Nitrogen Co., Ltd., \$4,000,000, Montreal, Que.
J. W. Scales, Ltd., \$200,000, Toronto, Ont.
The Rathbun Match Co., Ltd., \$125,000, Deseronto, Ont.
Kerosene Burning Carburetor Co., Ltd., \$100,000, Berlin, Ont.

Ont.

Vanophone Co., Ltd., \$200,000, Toronto, Ont.



An all-round proposition—American Industries.

TRANSPORTATION

By J. E. WALSH

APPLICATION OF WESTERN BOARDS OF TRADE FOR COMMODITY RATES TO THE MIDDLE WEST.

ACTION is being taken by some of the distributing centres in the Middle West (west of Winnipeg) to secure a change in the Canadian Freight Classification, particularly the rules in respect to mixed carload shipments, and the following resolution adopted by the Edmonton Board of Trade has been placed before the Board of Railway Commissioners:—

"Whereas the conditions governing carload shipments of merchandise as provided by the Canadian Joint Freight Classification, No. 16, and Supplements thereto, are largely based on conditions which have long since passed away, inasmuch as in numerous instances the minimum weight required to secure carload rate of freight bears no reasonable relationship to the carrying capacity of the cars; and mixtures are permitted under certain headings which to a large extent destroy the carload character of the shipment;

"And whereas, owing to the increased settlement of Western Canada and the development of numerous distributing centres, these conditions are no longer necessary to facilitate the distribution of merchandise throughout the West, and tend to compel the railways to handle the traffic at a maximum of cost, thereby preventing the possibility of the further rate reductions considered throughout Western Canada to be highly desirable, and causing economic loss to the country at large, by which no one benefits;

"Therefore, be it resolved, that the Board of Railway Commissioners for Canada be respectfully requested to order such a revision of the Canadian Joint Freight Classification as will provide conditions under which the railways can handle the traffic at lower cost, such revision providing for,—

(a) The provision of a greatly extended list of commodity rates providing for shipment to Western distributing centres of goods of the same or closely analogous character in loads, the weight of which shall bear some approximate relationship to the carrying capacity of the car, and to be carried at rates proportionately lower than when similar goods are shipped in mixed cars of smaller minimums.

(b) A restriction of the mixtures permitted to ship at carload rates under part (c) of Rule 2 of Classification, so as to confine such shipments to goods more closely analogous in character; and that no tariff exceptions to this rule be permitted.

"Due regard being had in each case to the circumstances and conditions under which the commerce of Western Canada is carried on."

Arguments for Resolution.

It is stated in support of the resolution that there has been a constant demand from Western Canada for lower rates for the carriage of freight and it is assumed that no further reductions can be looked for in the present rates which are the result of the judgment of the Commission in the Western Freight Rates Case decided last year. It is, therefore, suggested that the only prospect of relief is a curtailment of the mixing rule with higher carload minimums, thus confining the movement of traffic to straight carload

lots. The object of the movement, no doubt, is to give the distributing centres in the West the advantage of their geographic position.

The proposition has not been received with favor by some of the Boards of Trade, particularly by those in Winnipeg, Montreal and Toronto.

The Calgary Board of Trade have to some extent supplemented the above resolution with this difference—they make it clear that they do not ask that the mixing rule be abolished but rather confined strictly to the present rule in the Canadian Freight Classifications, as follows:—

"On shipments between points west of and including Port Arthur, Ontario, and from points east of Port Arthur, Ontario, to Port Arthur, Ontario, and points west thereof and vice versa. (See Note):

"Articles under different distinctive headings will not be taken in mixed carloads at carload rates.

"When articles under one distinctive heading are of the same class C.L., the carload rating and highest minimum weight for such class will apply.

"When two or more articles enumerated under one distinctive heading are provided with different C. L. ratings they will be accepted in mixed carloads at the highest carload rate, and the highest minimum weight applicable on any article in the shipment.

"When a shipment of one commodity, or a shipment of different articles under one distinctive heading and subject to the same carload rating, equals or exceeds the minimum carload weight, then the C.L. rating for such lot will apply, and any other article not of the same class, or not under the same distinctive heading, loaded in the same car (or cars), will take the L.C.L. rate of the class to which it belongs.

"NOTE.—The distinctive headings referred to are shown in black face type—as 'Agricultural Implements,' 'Hardware,' etc."

Calgary Resolution.

The resolution of the Calgary Board of Trade and their reasons in support thereof are as follows:

"Whereas, owing to the great distance over which the communities of Western Canada, particularly those in Alberta and Saskatchewan, are compelled to bring most of their supplies of merchandise, necessitating unavoidably heavy charges for transportation, rendering such cost of transportation a much more material factor in the ultimate cost of such goods than is the case with communities closer to their sources of supply, thus rendering it imperative that the traffic be carried, so far as it is reasonably practicable, under such conditions as will permit it being handled at a minimum of cost;

"And whereas the conditions governing carload shipments, so far as concerns Western Canada, as provided by the Canadian Freight Classification and supplements thereto are largely based on conditions which prevailed in the early stages of the country's development, but which have now largely passed away; and provide for the handling of many common and staple lines of merchandise in carloads, only at rates based on mixed cars of minimum weight bearing no

reasonable approximation to the carrying capacity of the car;

"And whereas during the period that has elapsed not only has the carrying capacity of freight cars been enormously increased, but the population and commerce of Western Canada has developed to such an extent as to permit many lines of merchandise to be handled in carloads of much greater weight than the minimum provided and without using the mixing privilege, while the main features of the classification have not been materially changed to take advantage of the changing conditions so as to reduce the cost of handling the traffic, economic waste resulting;

"And whereas the present classification provides conditions under which much of this traffic is handled at a maximum of cost to the carriers and changes could be effected which would permit lower rates to be put into effect on many lines of goods without impairing the revenues of the railways, and without in any way hampering the commerce of Western Canada, or imposing hardship or inconvenience on any section of the community;

"And whereas certain privileges to certain lines of trade have developed in regard to mixing, resulting from concessions granted to meet conditions which no longer exist, such concessions being contrary to the spirit and intention of part (c) of Rule 2 of the Classification and affording special privileges to certain lines of trade not accorded to shippers in general;

"Therefore, be it resolved, that the Board of Railway Commissioners for Canada be respectfully urged to direct the railways under its jurisdiction to prepare and submit for approval a revision of the Canadian Freight Classification, or to otherwise arrange such changes in or additions to their traffic schedules, as will permit the traffic of Western Canada to be handled at a minimum of cost, having due regard to the circumstances and conditions under which the commerce of Western Canada is carried on, such changes to provide for:—

(a) A greatly extended list of commodity rates, providing for shipment to or within Western Canada of goods of the same or closely analogous character in carloads, the weight of which shall bear some approximate relationship to the carrying capacity of the car, to be carried at rates proportionately lower than the present class rate provided for shipment of similar goods in mixed cars of small minimums; it being understood that such new rates and conditions shall be in addition to those now provided for shipment in mixed cars, and that the privilege of shipping at carload rates in mixed cars shall not be abolished.

(b) That the privilege of shipping mixed cars at carload rates of freight be confined to the provisions of part (c) of Rule 2 of the Classification and that exceptions to this rule in favor of special lines of trade, by tariff or otherwise, be not permitted."

Both these resolutions are entitled to serious consideration on the part of manufacturers. No doubt, the tendency is to move traffic in straight carloads to the Middle West and any readjustment of rates, which can be brought about and which will develop this movement without causing injury to any interest, would seem to be worthy of encouragement.

The Transportation Department would appreciate the views of interested members on this subject.

EXPRESS MERCHANDISE RECEIPTS AND LABELLING PREPAID AND COLLECT PACKAGES.

The Dominion Railway Board has made the following orders, based on the evidence submitted at the sittings in Ottawa on February 16th, at which the Canadian Manufacturers Association and other bodies were represented:

1. It is ordered that Subsection (c) of Section 5 of the "Terms and Conditions" endorsed on the Express Merchandise Receipt, be struck out, and that, in lieu thereof, the following new subsection be inserted:

"For any loss or damage caused by delay or by injury to, or loss or destruction of the shipment, or any part thereof, from conditions beyond the control of the Company, unless such loss or damage is caused by the negligence of the railway company upon whose trains or property the shipment was at the time such loss or damage occurred."

2. And it is further ordered:

(a) That express companies subject to the jurisdiction of the Board shall firmly affix a printed label to every shipment of goods received for carriage, which label shall indicate in conspicuous type whether the charges thereon have been prepaid, or are payable by the consignee.

(b) One such label affixed to any one package or article in a shipment composed of two or more packages or articles may suffice, provided that the label indicates the total number of packages or articles in the shipment.

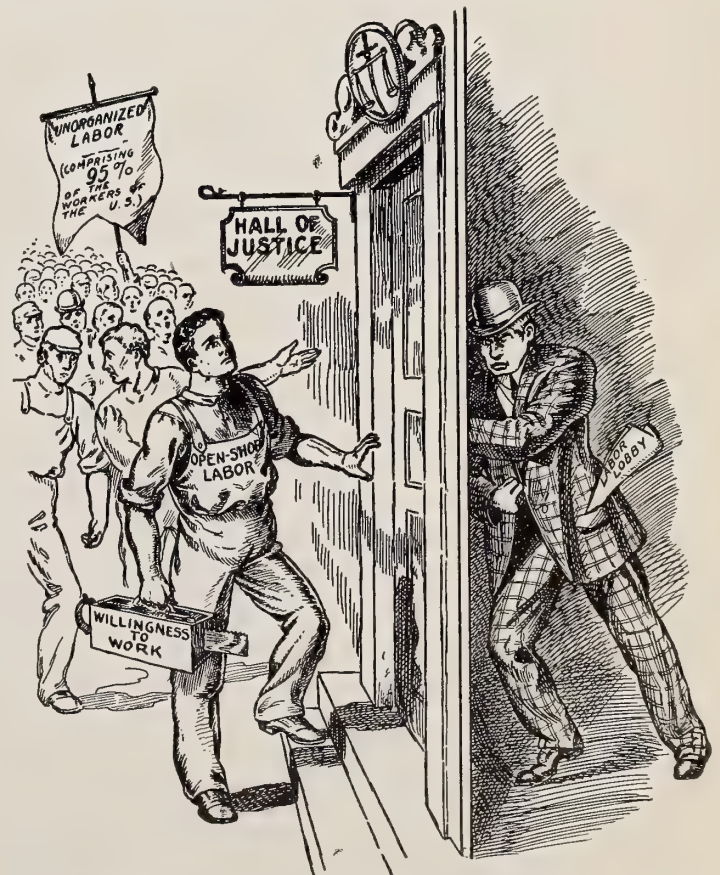
(c) For "prepaid" shipments the label shall be printed in black on yellow paper.

(d) For "collect" shipments the label shall be printed in black on white paper.

(e) Permission of the consignee shall be obtained before the removal of any tag, wrapper or portion of wrapper from any package or article.

OPPORTUNITIES IN WEST INDIES.

An interview with Mr. F. J. Cragg, of Cragg Bros. Co., Ltd., Halifax, appeared recently in the *Maritime Merchant*, describing his visit to the British West Indies. He believes that their purchasing power has been greatly increased and that they offer a good market for Canadian manufactures. He also referred favorably to the service of the Royal Mail Line to the West Indies.



Shall the walking delegate be permitted to close the door of opportunity against this vast army of unorganized wage earners?

I N S U R A N C E

MOOSE JAW'S 1914 FIRE LOSSES.

MOOSE JAW'S fire chief recently submitted his report for 1914 to the city council, and it is claimed that the city has the lowest fire loss for 1914 per capita of any city in Canada, that of \$1 per head of population. The total loss for 1914 was \$23,163 as compared with a loss of \$113,500 in 1913.

Insurance Companies' Liability.

The Oregon House of Representatives has passed a bill providing that any insurance company of any kind shall pay the face amount of its policy in case of total loss, unless it can prove actual fraud. All laws and parts of laws inconsistent with this provision are repealed.

Personal Liability for Fires.

The National Fire Protection Association is working actively for the enactment in the various States and Provinces of North America of a law fixing personal liability for fire due to carelessness. The suggested bill reads as follows:

Section 1. Any person, persons or corporation for any fire caused by, resulting from, or spreading by reason of the negligence of such person, persons or corporation or the non-compliance with any law or ordinance or lawful regulation or requirement of or by any state or municipal authority, shall be liable: (1) for all loss, expense or damage caused by or resulting from such negligence or non-compliance; and (2) for any expense incurred by any municipal or other governmental agency in extinguishing or attempting to extinguish any fire so caused, resulting or spreading.

Section 2. In all actions against any person, company or corporation for the recovery of damages on account of any loss or injury to any property, real or personal, occasioned by fire communicated from property owned by one party to property owned by another party, the fact that such fire was so communicated shall be sufficient evidence to charge the occupant of the property in which the fire originated with negligence, and place the burden of proof upon him.

To Discourage Policy Loans.

The Insurance Commissioner of the State of South Carolina has sent the following letter to all life insurance companies operating in the State:—

"After most careful consideration of the matter, and voluminous correspondence on the subject, I believe the safety of the policyholders as a whole requires that the companies reserve the right in their policies to defer paying cash surrender values or making policy loans for any other purpose than the payment of premiums for a period of at least sixty days after application for the same has been filed.

"Therefore no policy will be approved by this department after April 1, 1915, which does not contain a clause reserving the optional right to the company to defer payment of a cash surrender value, or making of a policy loan, except for payment of a premium, for a period of at least sixty days after application for the same has been made. If a company chooses to make the optional time for deferred payment longer, not to exceed six months, however, it may do so.

Such action should in some measure tend to check the rapid development of the use of policy loans. If a policyholder

knows that he cannot obtain the amount of the loan for at least two months, he will probably, in many cases, decide that he can get on without it.

Liability of a Broker.

Best's *Insurance News* comments on the case of Israelson and Williams recently decided in the United States: A broker's liability by reason of his carelessness has often been discussed in the courts. It is frequently claimed by the insured that their brokers have not obtained a policy in accordance with the order for insurance which the insured has given, and the broker's answer to this usually is that the insured was put on notice when he received the policy. It was, as the broker contends, the duty of the insured to examine his policy and, finding that it was not in accordance with the order, to have returned the policy for change. This contention was raised by a broker where the order had been given for a policy permitting other insurance, and the policy supplied granted no such permission. The insured suffered a loss but could not recover from the Insurance Company, and, in turn, suit was brought against the broker for negligence.

The court answered the defence of contributory negligence on the part of the insured in failing to examine his policy, by holding that the insured was entitled to get the insurance he ordered, and that unless the broker can prove that the insured read his policy and knew that other insurance was not permitted the broker is liable. The Appellate Division of the Supreme Court upheld the judgment of the lower court.

Workmen's Compensation in New York.

Governor Charles S. Whitman of New York has addressed an emergency message to the Legislature of that State commenting strongly on the waste and extravagance of the methods of the Workmen's Compensation Commission. He points out that the Legislature appropriated the sum of \$500,000 to meet the expenses of the Commission for the fiscal year commencing October 1st, 1914, but that at the beginning of February there was already a deficiency of \$25,000. In other words, an appropriation made for twelve months was exhausted in three. Governor Whitman considers that the deficiency is caused both by failure to provide sufficient funds in an appropriation bill and by great extravagance. He stated that the result shows that the attempt by the State to do the business of its citizens must inevitably cause enormous expense to the State Government, besides the inconvenience and disorganization of private business and injury to private interests, whether of capital or labor. He adds:

"The present grave condition of the finances of the Commission is due as much to the gross extravagance and waste of the Commission in its organization as in the conduct of its business. The law creating the Commission provides that it shall have its principal office at Albany. Instead of this it has hired an office in the City of New York at an annual rental of \$35,000. Its bill for the furnishings of these offices is absurdly extravagant. The rate of compensation paid to employees is inexcusably high, one special counsel receiving \$10,000 for three months services. The number of employees seems grossly excessive."



T A R I F F

By J. R. K. BRISTOL

British South Africa.

FOR war revenue purposes the Union of South Africa has advanced its Customs tariff on beer, playing cards, coffee, sugar, tea, boots and shoes and certain other items. Articles not specified in the South African tariff, which constitute the greater percentage of dutiable importations, are dutiable at 17 per cent. under the British Preferential Tariff and 20 per cent. under the General Tariff, instead of at 12 per cent. under the Preferential Tariff and 15 per cent. under the General Tariff as formerly. The new rates of duty came into operation on the 11th ult.

Cutlery Invoices.

It is advisable that invoices for cutlery, including scissors, destined to British South Africa, in the case of goods that are not plated, should be endorsed "not plated," so as to save delays at the Custom House. These articles when not plated are dutiable at 17 per cent. preferential, and if plated the preferential rate is 22 per cent.

New Zealand.

Advices received from New Zealand indicate that there will be tariff changes during the coming session of Parliament for the purpose of augmenting the revenue. Particulars on these tariff changes will be reported as soon as notice thereof comes to hand.

Bahamas.

By recent amendments to the tariff of the Bahamas additional duties are imposed by way of surtax of 10 per cent. of the regular duties leviable on all imported dutiable goods. This amendment came into force on the 8th day of March ultimo.

Jamaica.

The tariff on goods subject to ad valorem rates has been advanced from 10 per cent. to 16 2/3 per cent. on importation into Jamaica. This rate applies on all unenumerated goods, which covers by far the largest list of goods imported into Jamaica under any dutiable item.

Russian Tariff.

It is announced that the tariff of Russia has been advanced on most articles 10 per cent., but on certain cotton fabrics and cotton yarns the advance ranges from 30 per cent. to 50 per cent.

Enemy Origin.

In respect to goods manufactured in a neutral country from materials of German or Austrian origin, exported from either of those countries since the outbreak of war, the Department of Customs expects Collectors of Customs to question the right to entry of any such shipment when they have reason to believe that a large proportion of the value is of German origin. In the case of such manufactured goods the Collector of Customs may require an affidavit to be furnished setting forth whether or not the value of the German or Austrian material so used is less than 50 per cent. of the total value of the goods in condition as ready for shipment to Canada.

Departmental Rulings.

Hat Braids, per samples, dutiable at 7½ per cent. General Tariff, Item 641.

Illustrated Advertising Wrappers, per sample, dutiable at 15c. per pound and 7½ per cent. ad valorem.

Cash Registers, ruled to be not entitled to export for repairs conditional on return on payment of duty on the value of the repair work.

Remission of Duties by the British Government on Gifts from Oversea Dominions for Free Distribution During the War.

The Lords Commissioners of the Treasury have authorized the Commissioners of Customs and Excise to remit Customs duty on gifts from the Oversea Dominions intended for free distribution during the war, provided (a) that the gift is from the Government of the Dominion concerned, or is vouched for by such Government as being intended for free distribution and not for sale; (b) that the goods sent are intended for the use of sick and wounded soldiers and sailors in hospital, or of Belgian refugees, or for the relief of distress in this country, and (c) that they are addressed to Hospitals and Convalescent Homes which the War Office or Admiralty declare to be properly accredited by them, or to a central authority to be approved by the Board of Customs for distribution to refugees in authorized depots under the authority's direct control, or to an agency for relief of distress approved by the Government Committee on the Relief of Distress.

BOOTS AND SHOES REQUIRED BY FRENCH GOVERNMENT.

A firm in Birmingham, England, who have already sold to the French Government goods valued at over £1,000,000, have informed Mr. J. E. Ray, Canadian Trade Commissioner, that they are prepared to purchase several thousand pairs of shoes required by the French Government, as well as leather laces and hay. Six copies of the boot specification have been furnished and may be obtained by interested Canadian manufacturers on application to the Department of Trade and Commerce, Ottawa. (Refer File No. A-1556.) It is stated that the contract cannot be secured unless the boots can be landed at Havre for 10s. 6d. per pair.

TO REFINE COPPER IN CANADA.

Gen. Hughes states that orders for shells for the allies to the extent of \$175,000,000 are being executed in Canada. He gave the further most important information that arrangements at Sault Ste. Marie, Ont., and Sydney, C.B., were now so far forwarded that henceforth Canada would refine her own copper, purify her own zinc, and manufacture her own brass for war munitions.

PIANOS FOR ARGENTINE.

That Canadian pianos should find a good market in the Argentine is reported to the Department of Trade and Commerce by Mr. H. R. Poussette, Canadian Trade Commissioner, Buenos Ayres. He says that the upright piano is in most demand, and suggests that Canadian manufacturers should send special travellers through the Argentine. Over three-quarters of the piano trade of the Argentine was formerly controlled by Germany.



LEGISLATION

THE "model" Workmen's Compensation Act of Ontario, consisting of 111 sections, has been amended after an operation of less than three months by an Act itself consisting of 33 sections. The fact speaks for itself, but a number of observations are pertinent:

It had been announced that no amendments would be made to the Act this year. It is safe to say, therefore, that the changes that were made were not considered serious. As a matter of fact, with one or two exceptions, they are of the most superficial and patchwork character. The cardinal defects of conception and draftsmanship are almost as glaring as they were before, but in a number of places where it was necessary, in order to administer the system, to fly in the face of the provisions of the Act, the necessary retroactive authority has been given. The two greatest defects in the Act are left practically untouched, possibly for the reason that in order to have remedied them it would have been necessary to disturb the form of the Act to a greater degree than would have been consistent with the attitude of the Government and the Board in defending it. It is still as impossible as ever for the Board or anyone else to say whether, for instance, a commercial traveller of a manufacturing firm is entitled to compensation under the Act or is entitled to bring an action against his employer. The Board has expressed the opinion that a commercial traveller is not entitled to compensation, and no premiums are being collected in respect of this class of employees. It depends, however, upon the decision of the Courts as to whether a commercial traveller is to be considered as "A person engaged in clerical work and not exposed to the hazards incident to the nature of the work carried on in the employment." Off hand one would say that this description was not particularly apt to cover the case of a commercial traveller or many other types of occupation which the Board appears to regard as excluded from compensation. The difficulty arises out of the technical effect given by the Act to the definition. If a person is engaged in clerical work and not exposed to the hazards incident to the nature of the work carried on in the employment he is not a "workman" and cannot be made a workman by the Board or by the employer. If he is a workman he is entitled to compensation whether the employer pays assessments in respect of him or not. If he is not a workman he is not entitled to compensation, even if the employer has included him in the assessment. If he is a workman his rights of action at common law and under Part 2 are taken away, and if he is not a workman he may be entitled to bring an action against the employer. It will require the decision of the Privy Council in any one of thousands of cases that may come up before it is ascertained whether this or that particular shade of occupation places an employee inside or outside the compensation provisions. The least the Legislature could have done was to open the way for solving the difficulty by enabling the Board to take from the employer the assessments in respect of commercial travellers, etc., thereby bringing them within the Act, as the employers themselves can be brought within the Act. And it must be remembered that the case of commercial travellers is only an illustration of the situation of practically all employees not engaged in the strictly manual phases of manufacturing and construction.

The Assessment Clauses.

The feature of the Act most obnoxious to employers, namely, the provisions respecting assessment, were amended only in such a way so as to justify the actuarial scheme adopted by the Board more or less accidentally in view of the unworkability of the assessment provisions of the Act as originally passed. The Board appears to be now irretrievably committed to the Ohio plan of premium rating as against the Washington plan of assessment. Under the Washington system the assessments are made in quarterly or monthly instalments, and if the funds in any particular group are found sufficient any monthly or quarterly assessment may be deferred or passed over. At the end of the year it may be found that instead of the whole year's rate only six, or seven, or eight, as the case may be, of the twelve monthly instalments have been levied and that the rate for the year accordingly is six, or seven, or eight twelfths of the rate stated at the beginning of the year. Under the Ohio plan the State Insurance Board, through its officers, after an examination of the plant of the employer and his previous record, quotes a rate at which it will carry his insurance for the year. This rate is paid by the employer without reference to the actual requirements of the year.

The plan which the Ontario Board has fallen into combines, in a sense, the worst features of the Washington and Ohio plans. The employer is not sure of his rate and is liable to supplementary assessments; but no attempt is made at estimating the hazard of his particular plant. Under the Washington plan it is of little importance what rate is announced for the year, because the actual rate is determined by the number of accidents. The Ontario Board, apparently going upon the same theory, has imposed rates exhibiting anomalies of the crudest and most elementary character. Thus machine shops are arbitrarily divided into two groups representing respectively heavy and light machinery. The first are charged at a rate of \$1.50 and the second a rate of 80c. Furniture factories are charged a rate of 80c., organ factories 50c., and upholstering shops 50c. To the practical manufacturer these rates tell their own story. In Washington it would not have mattered so long as the rates were properly graded as between different members of the same group. Nothing could, of course, justify charging an upholstering shop the same rate as an organ or piano factory if they were in the same group. But it is the announced intention of the Ontario Board to maintain the estimated rates, at all events for this year; that is to say, whether it takes \$1.50 to provide the compensation for heavy machine shops or not the Board will collect that rate. No guarantee is given that if \$1.50 is insufficient a supplementary assessment will not be made. The actuarial practice thus set up amounts to the crudest possible method of premium rating.

Result of the Amendments.

Most of the groups of manufacturers, either through the Canadian Manufacturers Association or through their separate safety organizations, have protested against the method adopted by the Board. At first the reply was that the Act did not authorize the assessment method, to which the manufacturers rejoined neither did the Act authorize the method

adopted by the Board. The amendments would seem to have the effect of riveting upon the Province a system which if it had been anticipated by the manufacturers would almost certainly have turned the scales in favor of a system of individual liability. And nothing is more certain than that if it had not been for the Canadian Manufacturers Association a State Insurance System would not have been adopted.

The above remarks touch upon only two of many features that call for observation. It would be idle to pretend that the administration of the Act thus far has been satisfactory to manufacturers or that there is any promise of a solution of the difficulty. The hearings of the complaints of the manufacturers and the safety associations have not been in public and have not been the subject of public comment. Nor has the organization of the Safety Association been attended by any publicity. Some twenty-five of these associations have already been formed as representing the respective groups. It is only fair to say that the Board appears disposed to give every encouragement to the work of these associations. Unfortunately the great, in some cases insurmountable difficulty in the way of the associations is the unjust and inequitable method of rating which robs employers of the pecuniary incentive to co-operative effort in accident prevention. There is a world of work to do, and to undo, before the Ontario system can be said to be measurably successful.

The Nova Scotia Act.

At the session of the Nova Scotia Legislature just closed a Workmen's Compensation Bill was introduced which had been copied verbatim from the Ontario Act. By the time the bill reached the committee stage its defects were so apparent that it was promptly reprinted with some twenty sections "scrapped" entirely and the remainder redrafted. The bill as finally adopted contains only a relatively small portion of the Ontario Act.

The Nova Scotia Act will be found to contain some of the defects, accidental and otherwise, that are to be looked for in a new piece of legislation, but in form and practical conception it is an immeasurable advance upon the Ontario Act and represents what the Ontario Act does not represent, a logical and consistent application of the State Insurance principle. If the Province of Nova Scotia is as fortunate in its administration as it has been in its draftsmanship it will be in a position to render invaluable service to the other provinces of the Dominion.

Compensation in British Columbia.

In the British Columbia Legislature also, a copy of the Ontario Act was introduced. A brief consideration of the bill showed the necessity of radical amendment and it was dropped for the present.

THE DOMINION GOVERNMENT APPOINT A PURCHASING COMMISSION

A Purchasing Commission has been appointed by the Dominion Government, consisting of Hon. A. E. Kemp, Toronto, Chairman; Mr. Geo. F. Galt, of Winnipeg, and Mr. H. Laporte, of Montreal. This commission will have charge of all war purchases made under the appropriation of \$100,000,000, passed last session of Parliament.

PULPWOOD INDUSTRY THRIVING IN NORTHERN ONTARIO.

Chairman J. L. Englehart, of the T. and N. O. Railway Commission, states that pulpwood records for Northern Ontario are being broken in output, that conditions are promising, and that no real hardship is being experienced by the settlers.

Up to the first of April 72,000 cords of pulp had been handled, an amount even in excess of last year's output, and far in advance of all previous records for this season of the year. Of this amount 36,000 cords had already been disposed of, and the rest would go as soon as it could be handled by the railroad. Only 19,000 cords remained to be sold, and a market would not be difficult to find, he was sure.

THE ANSWER.

A Scribe from the west is propounding this question to the public men of Canada:

Which do you consider more patriotic, to buy manufactured articles which are imported so as to help increase the revenues of the government, or to buy the made-in-Canada goods and thereby help to give employment to workingmen?

This is one of those catch questions which, following the most illustrious of all examples, one might decline to answer categorically. Any direct answer given by the Prime Minister or the Minister of Finance could easily be distorted, and there is no valid reason for the Scribe's failure to propound the same question to Sir Wilfrid Laurier.

The fallacy, underlying the argument, coiled like a snake in the question is that the man who buys a product manufactured in Canada pays nothing into the public treasury. He does not do so directly any more than he does when he buys an imported article, but he does indirectly in one case as well as the other.

Take any article you may think of as an example—whether it be a plow, a shirt or an umbrella. We find first of all that the manufacturer has paid a tariff duty on the raw material, whether it be pig iron or raw cotton. He has also paid a tariff duty on his machinery or part of it; upon the coal he has consumed and perhaps upon semi-manufactured products which have gone into the finished article. The money thus advanced by him is collected from the ultimate consumer, just as the importer of the finished article collects sooner or later from the consumer. The man who uses the plow or wears the shirt is the man who pays the tax, and he contributes to the public revenue whether he buys the domestic or the imported article.

In the case of the article manufactured in Canada, the Canadian consumer knows that a part of the money he pays goes into the treasury and that another and larger part of it goes into the pay envelopes of Canadian workmen. The choice he is called upon to make is not whether he will or will not swell the revenues of the country, but whether he will maintain and upbuild the industries of Canada or the industries of some other nation.

Finally, the assumption that if we all bought everything at home there would be no revenue for the treasury is not to our mind alarming. If everybody bought only goods made in Canada the country would be so prosperous that the revenue would take care of itself. Unfortunately, we will have to always import many things into this country and to that extent pay tribute to Cæsar.

The western Scribe will then repeat the question asked twenty centuries ago: "Is it lawful to pay tribute to Cæsar?"

The answer given twenty centuries ago cannot be improved upon. Let us buy what we must abroad; let us buy all that we can at home.—*From the Toronto World.*

OCEAN SAILINGS FOR MAY. STEAMSHIPS LEAVING CANADIAN PORTS.

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, May 12; from Victoria, Makura, May 12.

China.

To Hong Kong—Blue Funnel Line: From Victoria, Ixion, May 5.

To Shanghai and Hong Kong—Canadian Pacific Railway Company's SS. Line: From Vancouver, Monteagle, May 31.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, May 12; from Victoria, Makura, May 12.

Great Britain.

To Glasgow—Allan Line: From Montreal, Pretorian, May 8; Scandinavian, May 22.

To Glasgow (via Panama Canal)—Blue Funnel Line: From Victoria, Calchas, May 12.

To Liverpool—Allan Line: From Montreal, Grampian, May 14; Hesperian, May 28.

To Liverpool and Glasgow—Allan Line: From St. John's, Nfld., Sardinian, May 21.

To Liverpool (via Panama Canal)—Blue Funnel Line: From Victoria, Calchas, May 12.

To London (via Panama Canal)—Blue Funnel Line: From Victoria, Calchas, May 12.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, May 12; from Victoria, Makura, May 12.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, Ixion, May 5.

To Yokohama, Kobe and Moji—Canadian Pacific Railway Company's SS. Line: From Vancouver, Monteagle, May 31.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, May 12; from Victoria, Makura, May 12.

Philippine Islands.

To Manila—Blue Funnel Line: From Victoria, Ixion,

RAILWAY BUILDING IN NEW BRUNSWICK.

The New Brunswick Government has been able to complete a large section of the Valley Railway during the past year, and has also been able to issue bonds to retire indebtedness outstanding and falling due at a better rate than some other Canadian cities or provinces. At the commencement of 1915 the Intercolonial Railway assumed the working of 120 miles of the Valley Railway, and trains are now running over between eighty and ninety miles of the section; a regular service is also expected to be shortly commenced upon the balance of the new mileage.

PERSONALS.

Sir William Price has resigned his position as President of the Quebec Harbor Commission.

A. S. Rendall, of St. John's, Nfld., has been appointed a director of the Nova Scotia Steel & Coal Company.

The President of Canada Foundries and Forgings, Mr. W. M. Weir, is leaving Montreal for Halifax in order to take a course of military training there.

Chas. C. Whittier, Manager and Treasurer of the Robert W. Hunt Company, has been transferred from Montreal to the Chicago office of the company. Charles Warnock has been appointed successor to Mr. Whittier as Manager and Treasurer of the company in Montreal.

The death is announced at the age of eighty-one of Mr. Alexander Bower, who was for over fifty-five years General Superintendent of the Canada Sugar Refining Company, Limited, Montreal. Mr. Bower retired from the company two years ago. He was a native of Edinburgh, but came to Canada at a very early age.

W. A. Rogers has opened an office at 301 St. James Street, Montreal, and will represent, among others, the Toronto Pottery Company, Limited, for the sale of their fire brick, sewer pipe, etc.

Col. A. Bertram, Chairman of the Dominion Shell Committee, has been prompted to the rank of Brigadier-General, attached to the general staff.

Arthur H. McGuire, of St. John, N.B., who has been on the travelling staff of the Canada Cement Company for many years, has been appointed sales manager for the company with headquarters in Calgary, Alta.

The Northern Navigation Company held its annual meeting at Montreal on April 1st, and Mr. H. B. Smith, of Owen Sound, was re-elected President of the company. Mr. Smith was also re-elected as a director of the Canada Steamship Lines, a subsidiary company to the foregoing.

The death took place at Berlin of Mr. John S. Anthes, one of the pioneer Ontario furniture manufacturers, on April 13th. Mr. Anthes was born in Wilmot township 70 years ago, and entered the furniture business as a young man.

NEW CATALOGUES.

1915—General catalogue.—The Stratford Mfg. Co., Ltd., Stratford.

SHELL MANUFACTURING IN WESTERN CANADA.

Arrangements are being made by the Government to investigate the facilities for manufacturing shells for the British army in Brandon, Regina, Moose Jaw, Portage la Prairie, Medicine Hat, Calgary, Lethbridge, Edmonton, Vancouver and Victoria.

Hitherto the shell orders have been placed in Eastern Canada and in Winnipeg.

DIRECTORY OF FOREIGN IMPORTERS.

A revised edition of the directory of foreign importers, published in 1911, has just been issued by the Commercial Intelligence Branch of the Trade and Commerce Department, Ottawa. Before compiling the volume, the Canadian trade officials in various foreign countries were requested to furnish the names of merchants who are buying, or who are likely to buy, Canadian goods.

In addition the directory contains a list of the principal oversea mail and cargo steamship services, and data respecting the Customs requirements of foreign countries and British possessions with regard to invoicing.

Supplemental lists of foreign importers will appear in the Weekly Report, Trade and Commerce Department.



We said Hydro Power was Cheapest

LAST month in this paper we made the statement that Hydro-Electric Power was cheaper than private supply. Now you can compare for yourself the standard rates of the two supplies, as published.

FIXED CHARGES:	PRIVATE SUPPLY CO.,	HYDRO
First 10 h.p. -	\$1.125	\$1.08
Next 5 h.p. -	1.125	.80
Above 15 h.p. -	1.125	.80
CONSUMPTION IN CENTS PER KW. H.		
First 50 hrs. use	.0135c.	.012c.
Second 50 hrs. use	.0072c.	.008c.
Thereafter -	.0018c.	.0012c.

These are Net Rates

If Hydro can put some of the money you are now paying out for power back into your pocket, you certainly want to know about it, don't you?

Hydro Engineers report fully on your power situation and tell you exactly how much we can save you

—and they do it with a minimum of bother and no expense to you. If you do not wish to make a complete change, you can test Hydro on any desired unit or section.

We are at the other end of your telephone wire.

The Toronto Hydro-Electric System

226 Yonge Street

Phone Adel. 2120

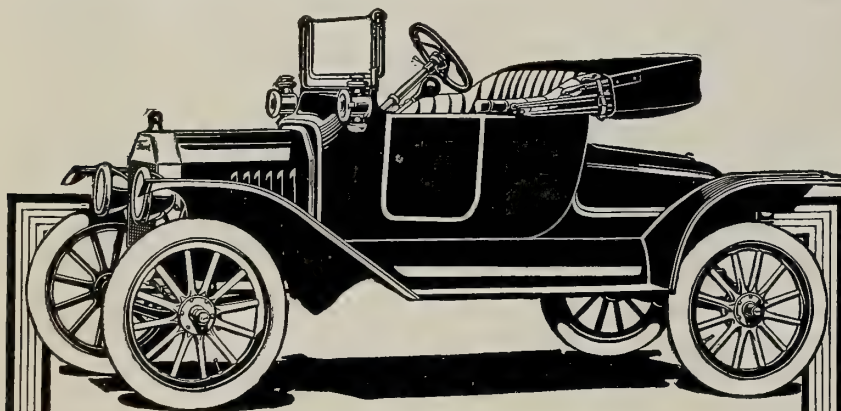
BANK OF BRITISH NORTH AMERICA REPORT.

Profits amounting to \$645,014 for the year are shown in the 79th annual statement of the Bank of British North America, which is published on page 11 of this issue. In this amount is included \$108,437, brought forward from last year; \$450,347 has been required to pay dividends at 8 per cent. and the balance of \$167,081 has been carried forward. The Reserve Fund now stands at \$3,017,333, and the assets are valued at \$69,604,000. The following appropriations have been made from the Profit and Loss account: Widows and Orphans Fund, \$7,862; Pension Fund, \$52,509; Life Insurance Fund, \$2,920. Donations amounting to \$24,333 have been made to the Canadian Patriotic Fund and the Canadian Red Cross Society.

The Bank of British North America has always been noted for its conservative policy, based on sound banking principles, and the report shows that this policy has not only withstood the severe test imposed by the recent extraordinary situation, but also enabled the directors to record a profitable year.

WANTED BY ENGINEER

Position where results are expected. Do not care to hang up certificate merely to fulfil requirements of law. Advertiser can design and erect plants, operate, conduct tests, test coal and analyze flue gases. Box 16, INDUSTRIAL CANADA.

**"MADE IN CANADA"**

Ford Runabout Price \$540

Your neighbor drives a Ford—why don't you? We are selling more Fords in Canada this year than ever before—because Canadians demand the best in motor car service at the lowest possible cost. The "Made in Canada" Ford is a necessity—not a luxury.

Touring Car \$590; Town car price on application. All Ford cars are fully equipped, including electric headlights. No cars sold unequipped. Buyers of Ford cars will share in our profits if we sell 30,000 cars between August 1, 1914 and August 1, 1915. Write Ford Factory, Ford, Ontario, for catalogue I—1.



When writing advertisers, please mention INDUSTRIAL CANADA.

NEW HEAD FOR LYMAN.

Mr. Arthur Lyman, who was elected a few days ago president of Lyman, Limited, wholesale drug manufacturers, has been connected with the firm for a great many years. The former president of Lyman, Limited, was Major H. H. Lyman, who was lost in the Empress of Ireland disaster.

TO MANUFACTURERS

The advertiser is open to represent one or more Canadian Manufacturers in the City of Hamilton and adjacent territory. Has large business acquaintance and excellent references. Correspondence invited. Confidential. Address

MANUFACTURERS' AGENT - P.O. BOX 65, HAMILTON, ONT.

CONDENSED ADVERTISING.**OFFICE AND FACTORY MANAGER WANTED.**

Experienced office and factory manager, sales advertising and financing, familiar with Canada from coast to coast, is desirous of getting in touch with a well grounded and lively industrial or manufacturing company. Will court closest investigation. Would take financial interest if desired. Box 15, c.o INDUSTRIAL CANADA, Toronto, Ont.

TREASURER.

Large Manufacturing Corporation, established 1850, location, Canada, has a vacancy for a highly efficient business man as Secretary and Treasurer. Must be able to invest at least \$5,000 cash, and give best of references as to ability and character. Contract with good salary guaranteed to right party. Investment absolutely secured. Answer in full or no attention paid. Box 12, INDUSTRIAL CANADA.

SALES MANAGER.

A Canadian Farming Implement Mfg. Corporation has an opening for an experienced sales manager, (preferably with experience in the above line), to take full charge of sales department. Attractive salary and commission contract guaranteed to right party; \$2,500 cash investment and A1 references required. This is a high-grade proposition for a high-grade man. Correspondence treated strictly confidential. Box 13, INDUSTRIAL CANADA.

FACTORY SUPERINTENDENT.

Position vacant for a high-grade Factory Superintendent, with executive ability, to take full charge of all branches of a Farming Implement Factory in Canada. Applicant must be able to invest \$2,500 cash and move at once to Ontario, Canada. Contract with good salary guaranteed to right party. Investment covered by guaranteed security. Apply Box 14, INDUSTRIAL CANADA.

YOU DO KNOW

that service is the most important commodity in modern business.

You demand it in your purchases. The public demand it in theirs.

BUT HAVE YOU REALIZED

that the service you give must depend on the service you receive?

WHAT SERVICE ARE YOU RECEIVING?

For a service that will insure a steady patronage, that will meet competition the modern manufacturer requires:

Perfect railway service.

Convenient water transportation.

Proximity to a good labor market.

Convenient deliveries for his local sales.

Sufficient land for factory and yards.

These you will find in the ***Toronto Harbor Industrial District***, with the additional advantage of private railway sidings constructed free of cost to the manufacturer and connected with three Transcontinental railroads.

For Particulars Address

The Toronto Harbor Commissioners

50 Bay Street

ALEX. C. LEWIS, Secretary

Toronto, Canada

NEW INDEX OF FRENCH BUYERS.

The Canadian Section of the British Chamber of Commerce in Paris, France, has done a great deal to promote Canadian trade interests in that country. In an effort to divert trade which has hitherto gone to Germany into British and Canadian channels the British Chamber of Commerce is just about to publish a trade index with highly specialized classifications in French, which will be distributed among 15,000 to 20,000 good French buyers.

It is desirable that the names of Canadian manufacturers who are in a position to cater to the French trade should appear in this trade index classified under the headings of the goods they produce. For this purpose the Canadian Manufacturers Association has been supplied with a number of forms which may be had upon application to the Secretary by any manufacturers interested. This form consists of an application for non-resident membership in the Chamber of Commerce, the annual fee for which is \$10. Membership provides for the insertion of the manufacturer's name under three headings without any additional cost.

TANKS FOR ROAD OILS.

The Asphalt and Supply Company, Limited, Montreal, are erecting on the Montreal harbor front three steel storage tanks, with a capacity of 90,000 barrels. A tank steamer with a cargo of 10,000 tons of asphaltic road oil is now on its way from Mexico to the port. The Mexican Eagle Oil Company, for which the Asphalt and Supply Company are the Canadian agents, are co-operating in an effort to enlarge the business in road oils, and as the Mexican Eagle Company have a large fleet of steamers, they can easily supply all the oil required. The oil, refined in Mexico, can be pumped direct into storage cars and despatched to buyers in any part of the Dominion.

Polarine



Correct lubrication for your motor is as necessary as proper food for your body.

Don't wear out your motor by using the wrong oil.

Polarine assures freedom from breakdowns and easy motoring under all conditions of load and temperature.

The Imperial Oil Co.,

Limited

TORONTO WINNIPEG MONTREAL
ST. JOHN HALIFAX

SOUTH AFRICAN PAPER REQUIREMENTS.

Mr. E. J. Wilkinson, the Canadian Commercial Agent at Durban, has forwarded particulars and samples of the kinds of paper generally used in South Africa. The samples submitted comprise wrapping, sealing and parchment papers, as the following particulars will indicate:—

Sample.

No. 1850.—Natural cap paper, 20 x 30, 10-lb. ream, packed 56 reams to the bale. Wholesale Natal price, TP cents a ream.

Similar paper, 13 lb. per ream, packed 40 reams to bale, wholesale price, 60 cents per ream.

No. 1851.—Buff cap paper, 20 x 30, 10-lb. to ream, packed 40 reams to bale. Wholesale Natal price, 60 cents a ream.

Similar paper, 13-lb. ream, 40 reams to bale, 71 cents a ream.

No. 1852.—Greaseproof paper, 18 x 33, 18-lb. to ream, 40 reams in bale. Wholesale Natal price, \$1.20 per ream.

Similar paper, cut 9 x 11, packed in lb. packets, 12 cents per lb.

No. 1853.—Sealing paper in rolls, 24 and 30 in. wide, \$7.50 per cwt.

No. 1854.—Sealing paper, 29 x 45, 35-lb. per ream, 40 reams in bale, \$1.80 per ream.

No. 1855.—Sealing paper, 29 x 45, 45-lb. per ream, 10 reams in bale, \$2.10 per ream.

No. 1856.—Sealing paper, 29 x 45, 60-lb. per ream, 10 reams in bale, \$2.35 per ream.

No. 1857.—Ochre glazed paper, 29 x 45, 60-lb. per ream, 10 reams to bale, \$2.05 per ream.

No. 1858.—Parchment brown paper, 29 x 45, 63-lb. to ream, 10 reams to bale, \$3.15 per ream.

The prices given are the wholesale prices ruling in Natal up to January 1st.

It is pointed out that there is no need to confine attention to the samples submitted and it is suggested that interested Canadian paper manufacturers should forward a set of samples, together with wholesale prices, to South Africa. A list of South African firms who would be pleased to hear from Canadian firms in a position to export paper has been furnished and may be obtained on application to the Department of Trade and Commerce, Ottawa. (Refer File A-609.)

RAILROAD CONSTRUCTION IN RUSSIA.

An important railroad is being built northward from Petrograd to a point on the Arctic Ocean near the Norwegian frontier, about 500 miles west of Archangel, on a portion of the Arctic coast line, reached by the end of the Gulf Stream, which makes the climate here much milder than at Archangel. A port will be created here that should never become icebound, as Archangel is in winter. This railway can be built during the progress of the war, as the Finns, who are not liable to military service outside of Finland, are available. The road is to pass through Petrozavodsk, on Lake Onega, with the southern terminus at Ekatherinenhaven, probably 750 to 800 miles from Petrograd. The distance would probably not be more than 150 to 200 miles farther than Archangel is from Petrograd.

Rapid expansion in general building work is expected in Russia, and simultaneously the extension and building of numerous railroad lines.—(U. S. Commerce Reports.)



Framework of Incinerator erected for City of Berlin, Ont.
By the Metal Shingle & Siding Company, Limited

Steel Construction

MANUFACTURING buildings, warehouses, sheds in any size and style can be furnished complete and ready to erect, or if required, we undertake the entire construction. Rigid steel framework such as we supply and heavy Acorn Corrugated Iron form the most economical buildings where protection from fire and durability are essential.

Among the buildings now under construction are the Incinerator shown in the cut, a steel garage 35 x 70 being erected for Godwin Bros., Niagara Falls, and a boat-house 44 x 116 for Richardson & Son, Kingston.

Correspondence is invited with manufacturers who need buildings of this nature.

Associated with A. B. ORMSBY & Company, Ltd.

Consolidated Factories at :

Montreal Toronto Preston Winnipeg
Saskatoon Calgary Regina

The Metal Shingle & Siding Company, Limited

PRESTON, ONT.

LET US ELECTRO-FY YOUR ADVERTISING

"RAPID" electrotypes are sharp, clean cut reproductions of original zincs and half-tones. They wear better than ordinary plates and cost exactly the same. You can count on efficient service, promptness and careful records of everything we do for you. Write us.

RAPID ELECTROTYPE COMPANY OF CANADA
347 Craig Street West MONTREAL

Messrs. Darling & Pearson, Toronto architects, have been retained by the Canadian Pacific Railway to prepare plans for the new station at North Toronto. It will cost \$800,000.

The Stephens-Hepner Co. are building an addition to their brush and broom factory.

DENNISTEEL
LONDON - CANADA

THE BEST STEEL LOCKERS MADE IN CANADA

MADE BY
THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON, CANADA



\$141,017.00 worth of abrasive wheels imported into this country in the last fiscal year, that should have been "MADE IN CANADA."

We can furnish the Canadian made goods of the best natural and artificial abrasives, by the vitrified or silicate process; in the latter, with or without the wire web.

Can be obtained from the following supply houses :

J. R. BAXTER & CO., LTD.
Montreal

H. W. PETRIE LTD.
Toronto

McDOUGALS LTD.
Ottawa

COWAN HARDWARE CO.
London

WALKERVILLE HDW. CO.
Walkerville

NORTHERN CAN. SUP. CO.
Cobalt

Or direct from the manufacturers,

DOMINION ABRASIVE WHEEL CO., LTD.
NEW TORONTO, ONT. CANADA

When writing advertisers, please mention INDUSTRIAL CANADA.

How to Obtain Better Business

A large number of Canadian Manufacturers have stated openly that improved conditions in their businesses are directly attributable to the "*Made-in-Canada*" Campaign.

In fact some Canadian Manufacturers, whose goods have been made known to the Consumer through advertising, have enjoyed better business during the past few months than during the same period in 1913.

THIS IS BECAUSE

the public has been familiarized with the names and qualities of the products and the fact that they are "*Made-in-Canada*," and is thus in a position to ask definitely for certain goods when buying, instead of having to make general enquiries.

If you are a regular Advertiser possibly our ideas as to how you can best take full advantage of the "*Made-in-Canada*" Campaign, which we are handling, would be helpful.

If your customers are restricted to a limited class possibly we could show you how inexpensively you can tie your proposition up with the general "*Made-in-Canada*" movement.

If you are not an Advertiser and your product has advertising possibilities, aside from the "*Made-in-Canada*" movement we might be able to suggest a method of development on conservative lines, which would appeal to you.

On request we will be glad to make a study of your particular needs and to submit complete plans and estimates.

Address nearest office.

A. McKIM LIMITED

ADVERTISING AGENCY

MONTREAL
Lake of the Woods Building

WINNIPEG
Union Bank Building

TORONTO
103 Bay St.
LONDON, ENG.
4 and 5 Norfolk St., W.C.

FOREST PRODUCTS OF CANADA.

Climax Seems to Have Been Reached and Output is Now on the Decline.

The total production of lumber in Canada in 1913 decreased 13.1 per cent. from that of 1912. The 1912 production decreased 10.7 per cent. from that of 1911. It would seem as if the climax had been passed and that the production were now declining at about the same rate as it increased up to 1911. The cut of lumber in 1911 was 4,918,202,000 feet, board measure, valued at \$69,475,784. The climax of production in the United States was reached in 1909, when 48,112 mills cut 44,509,761,000 feet of lumber, or over nine times as much as was produced in Canada in the climax year of 1911.

The above information is given in a bulletin recently issued by the Forestry Branch, Department of the Interior, Ottawa.

This bulletin gives the statistics of the production of lumber, lath and shingles by 2,187 mills operating in Canada during the calendar year 1913. The figures for 1912, which were gathered from 2,558 mills, are included for comparison. These figures are practically all gathered by correspondence with the mill operators. The total value of the lumber, lath and shingles produced in Canada in 1913 was \$70,644,362, the separate items being:—Lumber, 3,816,462,000 feet, board measure, valued at \$65,796,438; lath, 739,678,000, valued at \$1,783,283, and shingles, 1,485,279,000, valued at \$3,064,641.

Decreased Output and Increased Price.

Canada cut in 1913 a total of 3,816,462,000 feet, board measure, of lumber, valued at \$65,796,438. The cut in Ontario decreased by 20.5 per cent., while that of British Columbia decreased only 10.7 per cent. This resulted in a change of relative position, which puts British Columbia at the head of the provinces in the production of lumber, Ontario, which has headed the list in the past, falling back to second place. An increase in production in Manitoba of 82 per cent. brings this province up to seventh place and drops Alberta to eighth place.

Reductions in the cut of lumber are to be noted in every province except Manitoba, the greatest proportional reduction taking place in Saskatchewan.

The average price of lumber at the mill throughout Ontario increased by \$1.41, increasing in British Columbia, Ontario, Quebec, New Brunswick and Saskatchewan, and decreasing in Nova Scotia, Manitoba, Alberta and Prince Edward Island. The greatest increase in price (\$4.08) took place in Ontario.

Decrease in Lath and Shingles.

The decrease in lath production in Canada from 1912 to 1913 was 17.7 per cent. as compared with 6.9 per cent. from 1911 to 1912. Laths are usually a by-product to the lumber industry, inasmuch that they are almost invariably made from slabs, edgings and other material that would otherwise be burned as waste in the saw mills. Changes from year to year in the production of lath follow those in lumber production very closely. Saw mills in Ontario are able to employ a closer utilization of their material than those in British Columbia, and consequently produce more lath, although the British Columbia mills produced more lumber in 1913.

The decrease in the shingle cut in Canada from 1912 to 1913 was 5.9 per cent. as compared to 14.1 per cent. from 1911 to 1912. The cut decreased in British Columbia, Ontario, Nova Scotia, and Prince Edward Island, increasing in Quebec, New Brunswick and Manitoba. Alberta did not report any

production in 1914, but Saskatchewan reported a small quantity.

Items from the Report.

The three Prairie Provinces, Manitoba, Saskatchewan and Alberta, are chiefly engaged in the manufacture of spruce lumber. The few other kinds reported are relatively unimportant. The average mill cut in Saskatchewan was 4,592,000 feet, coming second only to British Columbia in this respect. The four kinds of lumber reported were produced in about the same relative proportions in 1913 as in 1912. The only increase shown was in the production of tamarac. The average price increased by 50 cents, the only decrease being in the price of tamarac. Aspen poplar, the only hardwood cut in the Province, formed less than a tenth of one per cent. of the total.

The cut of birch (Canada's most important hardwood) is made up of the wood of some seven species, three of which are of no commercial importance. Yellow birch is the most important commercially in point of quantity produced, and its wood is probably the most valuable. The tree grows as far north as Lake Abitibi, and extends westward about halfway along the north shore of Lake Superior.

There is only one species of beech in Canada, and in fact only one in America. The lumber is cut in the Eastern Provinces only, and is found in Canada in the Maritime Provinces and in the lower parts of the St. Lawrence basin, not occurring west of Sault Ste. Marie.

Manitoba was the only Province in Canada reporting an increase in lumber production in 1913. The mills cut, on an average, 1,439,220 feet each. The cut of every kind of wood but cedar increased, the greatest increase being with jack pine.

With the exception of Prince Edward Island the mills of Nova Scotia cut a lower average per mill than those of any other Province. The average in 1913 was 853,174 feet. Custom mills and small portable mills cutting out small stands of scattered timber are very numerous in this Province.

While the number of mills in Quebec and the number in Ontario is almost the same, the average production of mills in Quebec is only 921,558 feet as compared to 1,607,596 feet in Ontario. The larger number of small neighborhood or custom mills in Quebec cutting wood for the farmers accounts for this difference.

Ontario cuts a greater variety of woods than any other

"Metallic"

Building Materials

Build up Canada— Now is the Time!

Every dollar sent out of the Empire makes us all that much poorer. You can play a big part in supporting the Empire by using only Canadian or British-made building materials.

You can get as good, or better values right here at home. This is no exaggeration. Let us place our catalogues of the famous "Metallic" line — CANADIAN OR BRITISH-MADE THROUGH AND THROUGH—in your hands. With these and a little correspondence we can easily prove our claims.

The "Metallic" line includes, "Empire" Corrugated Iron; "Eastlake" Steel Shingles; Steel Siding; Ceiling and Wall Plates; "Hayes" Patent Lath; Skylights; Ventilators; Galvanized or Copper Cornices; Fire-proof Doors and Windows; Well Curbing; Culverts; Conductor Pipe and Eave-troughs.

METALLIC ROOFING COMPANY, LIMITED
MANUFACTURERS, TORONTO and WINNIPEG



Province. Counting the poplar group (aspen and balsam poplar and cottonwood) as one kind, a total of twenty-five kinds were reported. Douglas fir and yellow pine are the only Canadian woods not produced in this Province.

The seven most important kinds of lumber in Canada in 1913 were softwoods. Among the thirteen most important woods only three were hardwoods. Birch, maple, basswood and elm in the order named are the most important, and these together made up 83.5 per cent. of the total production of hardwoods.

ARMSTRONG WHITWORTH OF CANADA

— LIMITED —

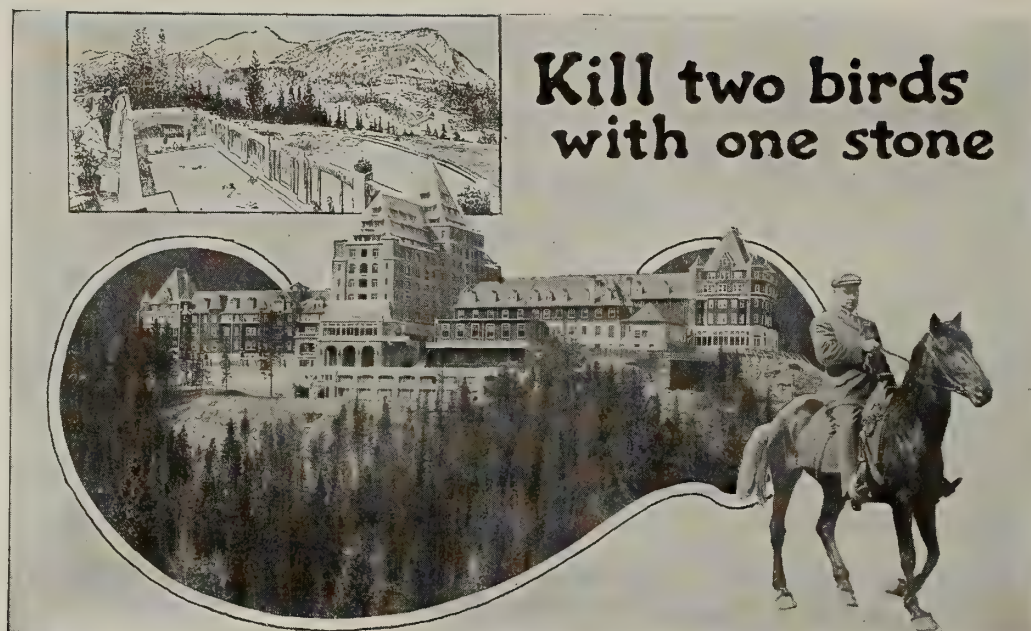
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"AW" FOR CUTTING ALL METALS
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If you are planning your 1915 trip to San Francisco, make sure your ticket reads via Canadian Pacific, otherwise you will miss the grandeur beauty of nature's most stupendous works—The Canadian Rockies.

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Are important tourist stop-over points on the Canadian Pacific Railway route to the Pacific Coast. These have excellent hotel accommodation, with opportunities for riding, climbing, swimming, boating and golf.

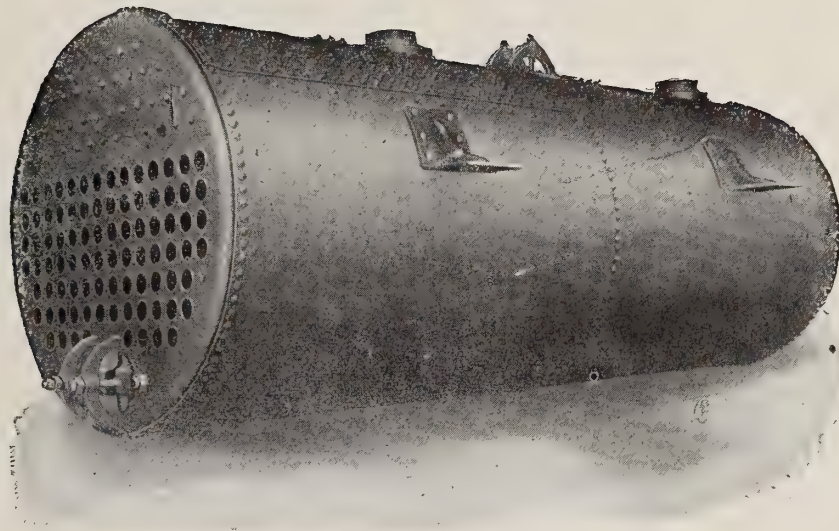
Agents will personally call on you to arrange your itinerary.

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W. FULTON,
Asst. District Passenger Agent,
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STANDARD RETURN TUBULAR BOILER

We make boilers of all kinds for any service.

We are also sole Canadian makers of Erie City Water Tube Boilers, Vertical and Horizontal.

The large number of pleased and satisfied owners of "INGLIS" Boilers is our best advertisement.

For (52) fifty-two years our boilers have been the standard. We have installations of our different types of boilers, which our representatives will be pleased to show to prospective purchasers. Write us for prices, etc.

INGLIS' PRODUCTS ARE "MADE-IN-CANADA"

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Toronto, Canada

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PEAT, LIGNITE AND COAL

Their Value as Fuels for the Production of Gas and Power in the By-Product Recovery Producer

THE trend of present-day civilization is in the direction of increasing industrial activity; it is natural, therefore, to look for rapid increase in the production of manufacturing commodities of all kinds. In order to obtain this marked increase in the rate of production, fuel in some form is required in ever-increasing quantity; and on account of the feverish industrial pace that has been set, the principal sources of the more commonly used fuels are rapidly approaching depletion.

In his introduction to his report on Peat, Lignite and Coal which has just been presented to the Minister of Mines, Ottawa, Mr. B. F. Haanel, B.Sc., Chief of Fuels and Fuel Testing Division, touches on a point which is of vital interest to manufacturers. He points out that the life of coal deposits is limited and that new methods of producing the fuel must be perfected. The report continues:

"The problem which confronts Canada, however, is not conservation; but the best means of rendering available the various supplies of low grade fuels. The great coal measures of Canada are situated in the extreme East and West; but, lying between these points is a vast territory devoid of coal measures, which is, at the present time, dependent on some foreign source for a fuel supply. In one sense conservation is being practised to a very high degree, because, in certain parts of the country practically all the coal required for domestic and industrial purposes is being imported from the United States, while valuable fuel deposits are lying practically intact. But this kind of conservation never leads to commercial or industrial prosperity, and cannot, therefore, be recommended. In order to render those portions of Canada which are devoid of coal measures independent of foreign supplies of fuel, at least to some extent, it is necessary to convert into some convenient form the great source of potential energy represented by the peat bogs, which are of great extent and well distributed throughout the middle provinces; and the same necessity applies to the lignite coals which are found and distributed throughout the prairie Provinces.

"Many of the peat bogs, which are peculiarly adapted for manufacture into fuel for domestic and power purposes, are conveniently situated as regards transportation facilities, and contiguous industrial communities. But notwithstanding this, the manufacture of the raw peat, contained in certain of the bogs, into a marketable fuel has not, up to the present time, met with much success; due, on the one hand, to the long list of failures recorded by those who have impracticably interested themselves in this problem during the past years, and on the other hand to unscrupulous speculators, promoters, and so-called inventors. The failures, so far recorded, may be ascribed principally to the methods employed for manufacturing the fuel. It is a fact that a flourishing and permanent peat industry has been established in Europe for almost a century, but no one in this country, thought of turning to the European peat-using countries for advice and enlightenment concerning the best process to employ for the manufacture of peat fuel in Canada. This seems incredible, especially at the present day when the inventor of processes is still able to hold the attention and sometimes the purse strings of astute business men. In Europe the annual production of peat is large. In Russia alone, during the last year, over 2,500,000 metric tons were produced; together with a large output in Germany, and other countries. The process

employed in all the European countries is the air-dried machine peat process, sometimes called the "wet process"; and this is the only economic process for the manufacture of peat fuel known to-day.

"Unless the manufacture of peat fuel is conducted on a bog situated reasonably near a community which is able to take over the entire output produced, peat manufactured for domestic or fuel purposes alone would not prove a profitable venture. This is due to the comparatively low heating value of peat to its moisture content, and to the large volume it occupies, per peat unit, as compared with coal; and when to these disadvantages is added that of high freight rates per ton, the reason of the foregoing statement will be obvious. But while peat may serve as a domestic fuel in only certain cases, it may be well adapted for the production of power, or as a fuel gas. Peat is a low grade fuel which must be manufactured and sold at a comparatively low cost, if it is desired that it should serve as a substitute for coal. It is evident, therefore, for the foregoing reasons, that the manufacture of peat fuel does not hold forth any glowing prospects for getting rich quickly, although reasonable and very good profits should in almost every case be realized when the industry is run on a business-like basis. But the element of speculation, and some of the commonly practised methods of promotion must be eradicated if the peat industry is ever to become an accomplished fact. There are certain bogs in Canada, of very large extent, well suited for the manufacture of peat fuel for domestic purposes, and the production of power and such bogs might be cultivated and colonized in a similar manner. All ploughing, harvesting, etc., could be performed by electric power, and the homes in addition, lighted by electricity. In this way a worthless tract of land could be converted into agricultural land of value."

Mr. Haanel's report is the result of the efforts of those who tried to put the peat industry of Canada on a firm foundation without success, and who later petitioned the Government to send a commission to Europe to investigate and report upon the methods and processes there employed for generating power from peat. Especial attention was paid to the by-product recovery gas producer power plants, and to the methods for preparing the peat for gas producers or steam boilers.

The report describes in some detail the methods for manufacturing peat fuel with special reference to the problems encountered in removing by pressure or by means of artificial heat the contained water. Mr. Haanel states that the artificial drying of peat cannot be accomplished economically, and that to attempt to reduce the water content of the raw peat to below 76 per cent. by hydraulic pressure will result in commercial failure. It is shown that, with peat costing \$1.50 per ton, delivered at the producer plant and having the nitrogen content of 1.5 to 2 per cent. power, can be produced as cheaply as with some hydro-electric plants; and, that where only gas is generated, the revenue derived from the sale of ammonium sulphate produced is sufficient to pay a profit on the investment, and to deliver the gas free of charge. The report deals very fully with the manufacture of peat fuel in Europe, the feasibility of manufacturing in Canada, the estimated cost of manufacturing sulphuric acid in Western Canada and the manufacture of lignite.

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GALT : ONTARIO

GOOD ROADS FOR NORTHERN ONTARIO.

Roads Must be Built to Connect Farms and Railways.

The Province of Ontario, through its Northern Development Branch, has demonstrated in a striking manner the beneficent effect of better roads upon agricultural districts. Commissioner Whitson, who has supervised for three years the road-building activities of the service in New Ontario, in addressing his report to Premier Hearst, says:—

"When inspecting the different districts along the roads which have been constructed during the last three years, I find that good progress is being made by the settlers; along these roads, nearly all the vacant land suitable for settlement is being taken up and improved. In the valley of the Rainy River exceptional progress has taken place; the settlers are now able to reach markets along the Canadian Northern Railway, which three years ago were inaccessible. Heretofore, where no roads were constructed, the settler was merely marking time; since the construction of roads, he has taken courage, and is now clearing up large areas of land, and in other ways improving his social conditions. This will apply to almost all the sections where good roads have been constructed. It has encouraged the settlers to build schools and has made it possible for the children to attend them. This in itself has done much to stimulate settlement, as in the past the want of schools and their inaccessibility for lack of roads, I have found to be one of the great obstacles in the way of settlement."

Since 1912 the Northern Development Branch has been engaged upon the construction of 1,705 miles of roadway, chiefly in the great clay belt and in the Rainy River District. At the height of last season from 4,500 to 5,000 men were employed. There were under construction 708 miles of road, of which 255 were new—cut out of the forest. Grading operations were proceeded with upon 296 miles; 108 were surfaced with gravel or crushed rock; 214 were partly graded, or improved by cutting down hills, and by ditching. Forty bridges were constructed. Three experimental farm plots were established at suitable locations. Last year's work involved an outlay of \$802,578.19. Since 1912 the expenditure by the Branch in this development has been \$2,076,833.27.

OPENING FOR CANADIAN GOODS IN BRITAIN.

Mr. Claude Dyer, Trade Commissioner in Leeds, England, has sent to the Trade and Commerce Department a list of manufactured articles, formerly imported into the United Kingdom from Germany and Austria, which might be supplied by Canadian manufacturers if prices could be made right:—

Chairs, clover and grass seeds, dried milk, egg albumen, engravings, fine art work, hardware specialties, hops, leather (undressed), leather (enamelled), leather (glace kid), leather (box calf), nails, oats, paper, pianos, pianoforte materials, picture moulding, prints, rags, sauerkraut, sausage casings, starch, staves, tanning extract, toys, veneer, wall paper, wood coat hangers, wood chair seats, wood clothes pins, wood pastry boards, wood pulleys, wood rolling pins, wood skewers, wood towel rollers, wood washboards, yeast (dried).

He also points out that the following articles were formerly imported into the United Kingdom from European countries, other than Germany and Austria, and thinks that Canada could supply some of them:—

Barley, box shooks, dairy products, egg albumen, flax fibre, flax seed, flour, horses, lumber, matches, oilcake, oats, paper, pit props, poultry, peas, rags, salmon, strawboard, veneer, wheat, wood pulp.

CANADIAN MADE

Our plea on behalf of our Roofings is not based alone on the fact that they are Canadian Made, but, above all, because they are well made.

NEPONSET PAROID ROOFING

is typical of the NEPONSET line of building products. It is the highest grade ready roofing ever made, and is considered the standard for all ready roofings.

We also make felt paper and various other kinds of paper and paper board products, especially, waterproof paper, such as case linings and building papers.



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Send facts about your roofing for
Specify kind of building.
Quote on paper as per sample attached and
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Made in Canada

BRANDS:

Cotton Polishing: Cream.

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XXX Extra, X Grand,
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**WASHED
COTTON
WIPERS**

Colored Cotton Wiping: Fancy, Lion, Standard,
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Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Mixed Colored,
Dark Colored.

Packed in Compressed Bales 500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

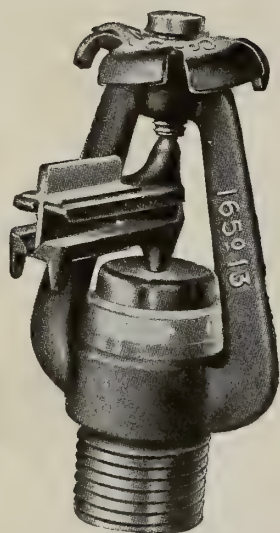
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Also headquarters for Cordage, Twines, Cotton Duck
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Like a Thief many disastrous fires come in the night - - -



There is considerable time between the watchman's rounds; and it is easy for a fire to get beyond control before the fire department arrives.

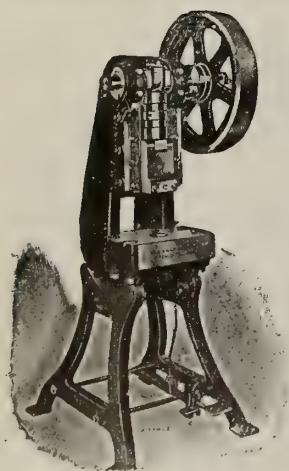
MANUFACTURERS' AUTOMATIC SPRINKLERS

are efficient watchmen and firemen; they are in every part of the building all the time and quickly put out the small blazes and save disastrous ones.

The saving in Insurance alone pays for an installation of Manufacturers' Automatic Sprinklers in five years.

Write us for particulars

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CHIEF OFFICE FOR CANADA, TORONTO



ALFRED WRIGHT, Manager, 8 Richmond St. E.

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

571. **Maple Sugar and Syrup, Canned Fruit, etc.**—A north of England correspondent wishes to secure agencies for the sale of Canadian maple sugar and syrup, canned apples, pears, peaches, etc., tomato specialties and similar lines.
572. **Railway Sleepers.**—A Liverpool firm is in the market for up to 1,000,000 railway sleepers per annum, 9 feet x 10 inches by 5 inches, and asks for quotations c.i.f. Liverpool or other English port. Samples should be forwarded.
573. **Rubber Goods.**—A north of England firm makes enquiry for names of Canadian manufacturers of rubber goods of every description wishing to enter the United Kingdom market.
574. **Chairs.**—A firm in the Midlands of England manufacturing chairs of all kinds wishes to get in touch with buyers in Canada.
575. **Asbestos, crude.**—A Manchester firm is in the market for Canadian crude asbestos.
576. **Triplex paper board.**—A London firm is in a position to place large contracts for supplies of triplex paper boards, and wishes to secure the representation of a Canadian manufacturer.
577. **Twines, cords, etc.**—A London firm wishes to get into communication with Canadian manufacturers of twines, cords, etc., of which they are prepared to buy considerable quantities.
578. **Salted Codfish.**—A firm in Marseilles, France, wishes to enter into relations with Canadian shippers of Canadian codfish.
579. **Canned Salmon.**—A company in Cairo, Egypt, asks for the addresses of British Columbia packers of canned salmon.
580. **Stationery.**—A Newfoundland firm wishes to be put in touch with Canadian exporters of stationery.
581. **Drygoods.**—A Newfoundland commission agent and wholesale jobber desires correspondence with Canadian exporters of hats and caps, men's, women's and children's underwear, corsets, suspenders, hosiery, pound goods, in lawns, cambrics, percale, etc.
582. **Locomotives, Cars, Mining Materials, Electric Apparatus.**—A French firm is desirous to enter into relations with Canadian manufacturers.
583. **Hosiery, Knitted Goods.**—A French firm is prepared to handle these lines for Canadian manufacturers.
584. **Boots, Gloves, etc., Knitted Goods, Rubber Cloths.**—An agent in Paris is enquiring for Canadian firms manufacturing above articles.

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Hammer Brand Plaster of Paris

Manufactured for Half a Century—the Standard of Excellence



Try it and Compare
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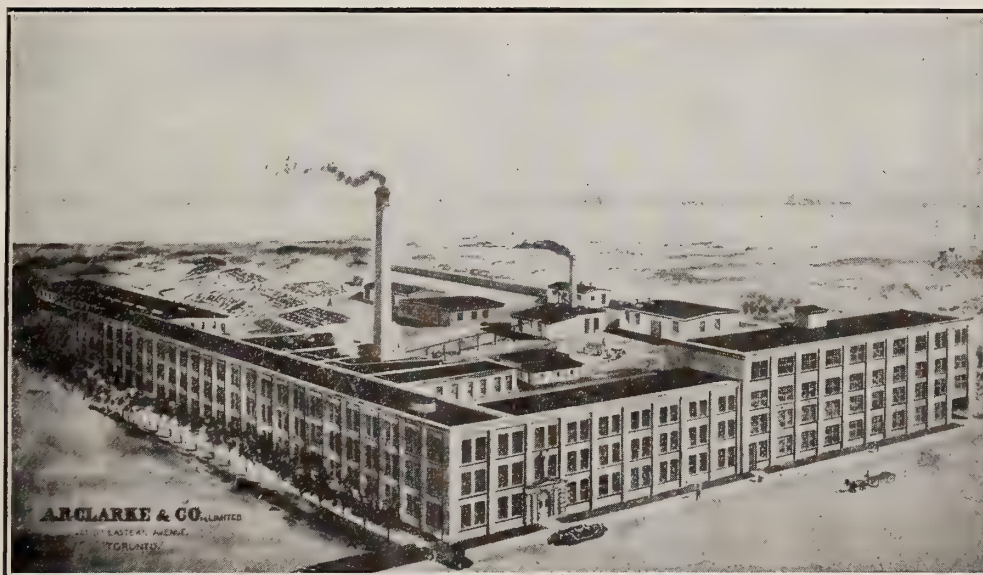
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The Largest Patent Leather Manufacturers
in the British Empire

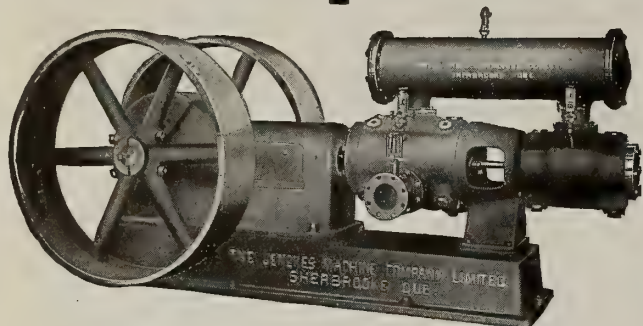
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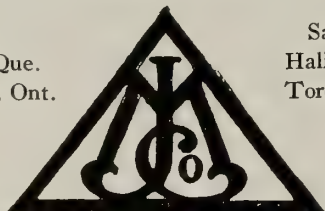
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Moderate in cost. Built to successfully stand severe and continuous service. Full range of sizes and types.

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A screw plate that is adjustable will appeal to your workmen. It makes for speed and accuracy. Reece's Screw Plate is adjustable—but it has in addition all the advantages of a solid die.

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ROCK ISLAND, P.Q.

DERBY LINE, VT.



**LET YOUR
WORKMEN
TRY IT**

585. **Fibre Board; South American Agents.**—A British firm or manufacturers' agents would like to hear of a Canadian firm manufacturing fibre board (samples at Department of Trade and Commerce), which is used in the manufacture of boots. They are also prepared to consider propositions from Canadian firms to represent them in the following lines: steam fittings and valves, rubber goods, brushes, carriage building material, hames, felt pads for harness, general hardware, lanterns, nuts, screws and bolts, oil cups, plumbers' supplies, sprays for fruit trees, tools, axes, hammers, etc., silverware, boots and shoes, boot polishes, and leather bags of medium quality.

586. **Underwear; Paper.**—A manufacturers' agent in Barbados whose business covers most of the islands in the West Indies, would be glad to have a Canadian agency for underwear, wrapping and news print paper.

587. **Asbestos Cement Roofing, Asphalt Roofing, Patent Floorings, etc.**—A manufacturers' agent in Manchester having a connection with the building trades wishes to get in touch with Canadian manufacturers of asbestos cement roofing, tiles and building sheets, composite building boards, asphalt roofing, patent floorings, glazed tiles and builders' ironmongery.

588. **Wooden Kitchen Utensils, etc.**—A London firm who seeks supplies of wooden kitchen utensils, including rolling pins and spoons, also towel racks and wooden toys, desires the addresses of Canadian manufacturers, particularly those who can manufacture according to sample required.

589. **Wood Mouldings.**—A London firm who are large importers of wood mouldings of all kinds invites offers from Canadian manufacturers.

590. **Wood.**—Wood entering into the manufacture of guns and aeroplanes wanted by a French firm.

591. **Boots, Threads for Boots, Wool, Boot Laces, Knitted Goods, Flannels, Felts.**—A French firm is open to receive offers from Canadian manufacturers.

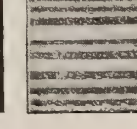
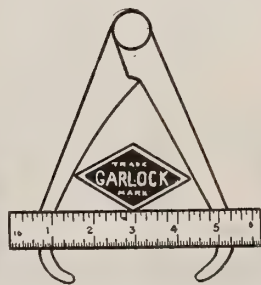
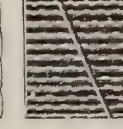
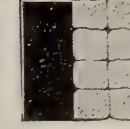
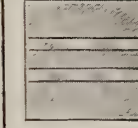
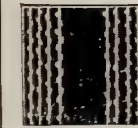
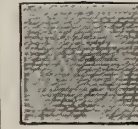
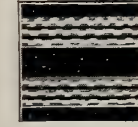
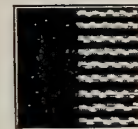
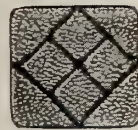
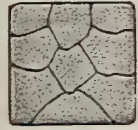
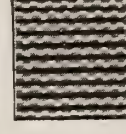
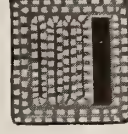
592. **Machinery.**—A firm in Paris who were representing German houses desires to receive catalogues, descriptions, and prices for wood-working and metal-working machinery and tools from Canadian manufacturers.

593. **Caskets, Coffins, and Coffin Furniture.**—A South African manufacturers' agent asks to be placed in touch with Canadian manufacturers of caskets, coffins and coffin furniture. Prices should be f.o.b. Montreal or St. John.

594. **Handles, Hardware, Tools, Shovels, Axes, Leather Belting.**—A Johannesburg firm of importers requests prices and correspondence on Canadian made broom handles, also all kinds of handles, mining hardware and tools, shovels, axes and leather belting. Prices f.o.b. St. John, are requested with samples.

595. **Bronze Powder.**—A Birmingham firm is desirous of purchasing bronze powder.

596. **Steel Street Car Rails.**—A municipality in the Midland counties of England inquires for quotations on ten tons of rails. (Specifications on file at the Department of Trade and Commerce).

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Have You Ever Considered the Loss

in engine efficiency due to excessive friction on piston and valve rods caused by use of inferior and poorly lubricated packing?

A horse-power easily can be absorbed at the stuffing box, and, when considered in dollars and cents at the coal pile, the loss would pay for a high-class packing many times over.

The Garlock Packing Co.

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Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

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Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

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LIMITED

213 Board of Trade Building, Montreal

597. **Wood Paving Blocks.**—An English municipality is open to buy 20,000 blocks, 3 inch by 9 inch by 5 inch. (Full specifications should first be obtained from the Department of Trade and Commerce).
598. **Street Car Rails and Wood Paving Blocks.**—An English municipality will be in the market in a few months' time for street car rails and wood paving blocks. Firms interested should quote per ton for sixty-foot rails, stating the specifications usually adopted. With regard to blocks, samples should be submitted. Sizes 3 inch and 4 inch wide by 4 inch and 5 inch deep by 7 inch to 9 inch long.
599. **Wood Paving Blocks.**—Another English municipality enquires for wood paving blocks. Samples should be submitted. Sizes same as quoted in foregoing enquiry.
600. **Lumber for Packing Case Making.**—A Manchester firm is open to purchase large quantities of lumber for packing case making, 9 feet by 3 feet, 11 feet by 3 feet boards and scantlings, and invites offers from Canadian manufacturers.
601. **Birch Veneer.**—A London manufacturing company is open to purchase large supplies of birch veneer to specification. They are also buyers of birch logs.
602. **Papers.**—A Glasgow importing firm is desirous of opening up business with Canadian manufacturers of box-makers and book-binders' papers, fancy and plain, also imitation leather, enamel boards.
603. **Corundum.**—A Glasgow house would like to hear from Canadian firms having supplies to offer.
604. **Plywood.**—A Glasgow firm desires to purchase 3-plywood in thickness 4 to 9 mm., various sizes.
605. **Veneer Wood and Log Timber, Birch.**—A Glasgow house would be glad to get information respecting supplies of above.
606. **Plywood, Birch.**—A Glasgow firm enquires if Canada can supply 3 equal ply birch 4½ to 4¾ mm., thick, cemented together with waterproof cement (not glue). Principal sizes required are about 24-inch x 18½ inch and 18½ inch x 18½ inch.
607. **Paper.**—A Glasgow house in the paper business are buyers of kraft browns, grease proofs, vegetable parchments, M.G. cap bag papers, wrappings and tissues. Samples and quotations asked for.
608. **Mica.**—A Birmingham firm inquires for samples and quotations.
609. **Paving Blocks.**—An English municipality would like to receive samples of ideal paving blocks, and quotations.
610. **Leather, Harness.**—A Cape Town commission agent asks for samples and c.i.f. prices, if possible, on harness leather. Further particulars on hand at Department in Ottawa.
611. **Nails.**—A Cape Town firm requests correspondence with complete information and f.o.b. quotations Montreal or St. John, on wire nails.

When Wanting
JUTE AND COTTON BAGS

Of Any Description
Think of the

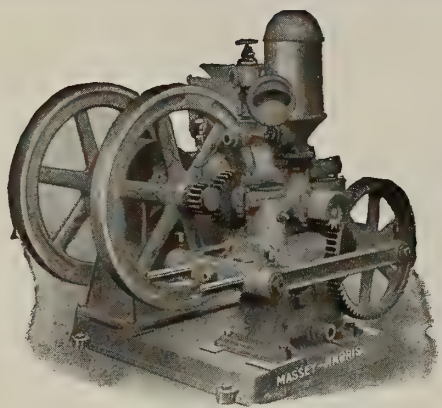
Smart-Woods, Limited

HEADQUARTERS FOR

**TENTS, AWNINGS, FLAGS
TARPAULINS, LUMBERMEN'S and
CONTRACTORS' SUPPLIES
and CLOTHING**



Montreal · Ottawa · Toronto · Winnipeg



MASSEY-HARRIS GASOLINE ENGINES

For the Contractor and Builder

FOR construction work of various kinds, a Massey-Harris Gasoline Engine will be found most useful. Above is shown one of our Engines connected direct to a Pump, and below is an Engine connected direct to a Diaphragm Suction Pump. Both of these combinations are very handy.

The Massey-Harris Contractor's Hoisting outfit is an indispensable part of the contractor's equipment. The engine is geared direct to the Hoisting Drum, although, when required for other purposes, it can be detached.

These Engines are also furnished in Portable outfits, from $4\frac{1}{2}$ horse power up, mounted on steel-wheeled trucks. A reputation for reliability, economy and convenience is what Massey-Harris Gasoline Engines have won for themselves throughout Canada and the United States, and every one sold brings in somebody else who wants one.

Information as to dimensions and prices of Engines may be had from any Massey-Harris Agent, or by writing direct to any of our Branches.

MASSEY-HARRIS COMPANY, LIMITED
HEAD OFFICES, TORONTO, CANADA

Branches at

Toronto Montreal Moncton Winnipeg Regina
Saskatoon Swift Current Yorkton Calgary Edmonton

Agencies Everywhere



612. **Cheddar Cheese.**—A Cape Town firm requests correspondence with complete information from exporters of Canadian Cheddar cheese. Will act as agents for Cape Town Province or purchase outright.
613. **Flour.**—A Cape Town commission and merchant house is prepared to take up an agency for Canadian flour for Cape Province only.
614. **Leather.**—A Cape Town firm will purchase or sell on commission sole leather, harness leather and rough tan splits. Immediate correspondence requested.
615. **Supplies, Railway and Mining.**—A Johannesburg firm of engineers and importers of mining and railway supplies will be pleased to negotiate with suitable firms in Canada for their representation in South Africa.
616. **Paper.**—A Cape Town firm requests samples of news, printing, wrapping and manifold carbon papers, if possible, please quote c.i.f., Cape Town.
617. **Calendars.**—A South African firm supplying the book trade throughout South Africa will be pleased to hear from producers of calendars, wall pockets and other designs for traders with imprinted advertisements.
618. **Envelopes.**—A South African firm asks for samples and prices on all kinds of envelopes.
619. **Asbestos.**—A Durban firm of engineers and merchants asks for samples, prices and correspondence from Canadian producers and manufacturers of asbestos.
620. **Handles.**—A South African firm requests prices and samples on pick, axe and shovel handles. Prices should be f.o.b., Montreal or St. John.
621. **Shovels.**—A Durban engineering firm with connections on the Rand are prepared to take up Canadian agency for shovels.
622. **Paper—News.**—A South African firm of paper dealers requests samples and quotations on news, print and other printing paper.
623. **Buckboards.**—A London firm wishes to purchase Canadian "Buckboard" carriages and asks for names of manufacturers.
624. **Representation in France and Belgium.**—A French manufacturer's agent now in England, is prepared to correspond with Canadian manufacturers willing to consider the appointment of an agent to represent them in the North of France and Belgium after the war.

INTERNATIONAL HARVESTER EXHIBITS.

The International Harvester Company have prepared special exhibits for the Panama-Pacific International Exposition at San Francisco, Feb. 20th to Dec. 4th, and also at the Panama-California Exposition at San Diego, Jan. 1st to Dec. 31st. Special arrangements have been made to entertain visitors.

JULIUS COHEN & JOSEPHY

BRADFORD BERLIN TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. Write for prices to

H. V. ANDREWS, Canadian Representative 32 Church Street, Toronto, Canada



Canadian Plant
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ELEVATED STEEL TANKS AND STANDPIPES

For Municipal, Railroad
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NOTICE

To Manufacturers, Dealers
and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.
HON. FINLEY G. MACDIARMID, **D. M. MEDCALF,**
Minister of Public Works. Chief Inspector of Steam Boilers.

BROWN BROS., LIMITED



Manufacturers of

ACCOUNT BOOKS

Loose Leaf Ledgers, Binders, etc.
Leather Goods, Diaries, Paper,
Stationery, Office Supplies

OFFICE AND FACTORY - - TORONTO
SIMCOE, PEARL AND ADELAIDE STS.

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

MANUFACTURERS OF

GAS AND GASOLINE ENGINES

TANKS
AND
TOWERS
FOR
Sprinkler
Systems

TOWN WATER
SUPPLY
ETC., ETC

PUMPS
CONCRETE
MIXERS

HOISTS, Etc.

Write, if interested



THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President
ALEXANDER LAIRD, General Manager
JOHN AIRD, Assistant General Manager

Capital Paid-up - \$15,000,000
Reserve Fund - \$13,500,000

Extension of Canadian Trade

The Bank will make enquiries into the possibilities and requirements of markets abroad for exporters or importers who desire to extend their trade with British colonies or possessions. Owing to the large number of its correspondents and agents it has unusual facilities for this work.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . \$25,000,000
Capital Paid up . . . \$11,560,000
Reserve & Undivided Profits \$13,000,000
Total Assets . . . \$180,000,000

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LONDON, ENG., OFFICE—Princes St., E.C.

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DEMAND FOR DRY GOODS LINES.

In his report to the Trade and Commerce Department, Mr. D. H. Ross, Trade Commissioner at Melbourne, Australia, says:

"Canadian manufacturers of hosiery and underwear should take advantage of the exceedingly active Australian demand at present existing for these goods. The representatives of United States manufacturers, and the Australian branches of New York commission houses, are making strenuous efforts to capture the trade hitherto, to a great extent, supplied by Germany. Some of the principal lines of American goods now being exploited in Australia are: Hosiery, men's and women's, in cotton, lisle and silk; ladies' knitted vests, in wool, cotton, lisle and silk; children's knitted vests in wool, cotton, lisle and silk; infants' knitted goods, in all varieties. The bulk of the Australian requirements of men's underwear and cashmere hosiery is imported from the United Kingdom. The addresses of the leading Australian wholesale and retail importers of dry goods can be obtained upon reference to the revised edition of the Directory of Foreign Importers, issued by the Department of Trade and Commerce, Ottawa."

SPAIN WANTS WOOD PULP.

If the Canadian producers of wood pulp can quote prices to compete with the Scandinavians, Spain should present a good opening for their product. Those interested should communicate with the Department of Trade and Commerce, Ottawa, for the name and address of the writer of the communication referred to, as he is desirous of being brought into touch with one or several large Canadian producers of wood pulp. (Refer File No. A 1107.)

INQUIRY FOR BIRCH VENEER.

A company manufacturing tea chests and other cases is experiencing difficulty in obtaining supplies of birch from Russia and other customary sources of supply. It is open to purchase large quantities from Canada if satisfactory arrangements can be made. The birch veneer is required in thickness of 1-12, 1-20, 1-24 inch, 24 inches and upwards in width, and 54, 62 and 72 inches long. Quotations should be per 100,000 feet lots, face measure, prices c.i.f. London, exclusive of war risk. A sample, say 12 by 10 inch of any thickness convenient is desired. It is stated that the present inquiry is merely in the light of a sample order and that large and regular quantities could be taken. Those interested should communicate with the Department of Trade and Commerce requesting the name and address of the firm referred to in Trade Inquiry No. 434.

ERECTING BIG PLANTS TO MAKE DYESTUFFS.

United States chemical companies are bending every effort toward supplying textile mills and industries using artificial dyes with home products to replace German dyestuffs.

Reports to the Department of Commerce show that at least six plants are in course of construction for the manufacture of the coal tar derivatives upon which the colors used in cloth manufacture, varnishes and other products are based. Approximately \$6,000,000 is to be expended.

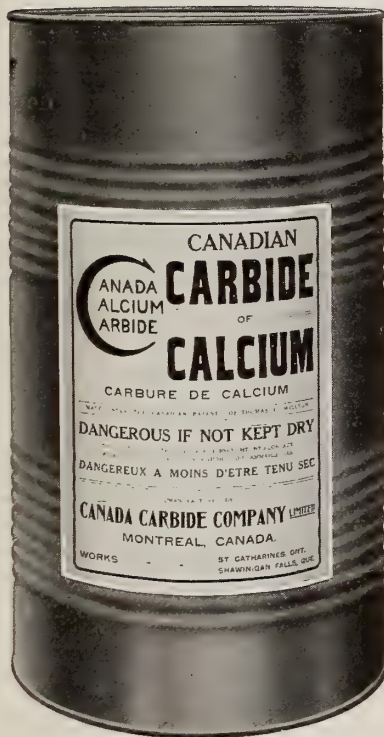
ELECTRIC STEEL CASTINGS

WE CAN SUPPLY

***Carbon, Manganese, Alloy, Steel Castings
Forging Ingots, Etc.***

Write for prices and particulars

The Electric Steel and Metals Company, Limited
WELLAND, ONTARIO



CARBIDE

CANADIAN Carbide made in Canada from high grade materials and by experienced workmen. We have all sizes ready for prompt shipment and guarantee quality.

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MONTREAL, CANADA

WORKS:

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MINIMUM INSURANCE PREMIUM**

Are Only Secured By Using



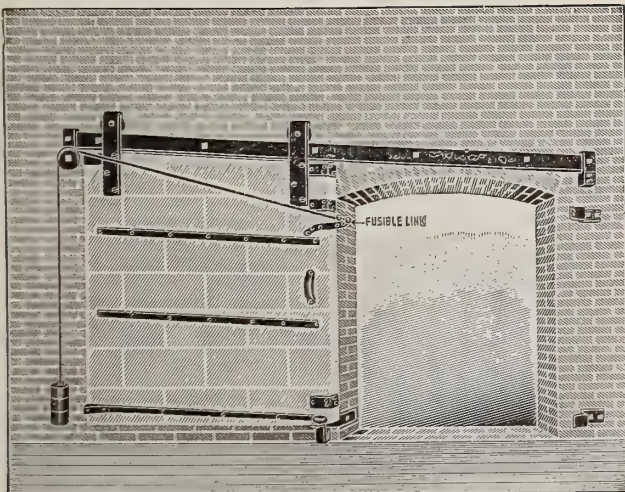
Look For The Label

Richards Monarch A
Fire Door Hardware

Overhead Carrying Systems

Use R - W Trolley Track and Hangers for all Sliding Warehouse Doors. Only right way to hang heavy doors: Catalog on request

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STEEL SHIPBUILDERS
ENGINEERS AND
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Hydraulic and Dipper Dredges,
Steel and Composite Steamers and
Yachts, Marine and Stationary
Engines and Boilers. :: ::

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ESTABLISHED 1875

The Boiler Inspection and Insurance Co. of Canada

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Issues Policies of Insurance after
A CAREFUL INSPECTION OF
THE BOILERS Covering LOSS
OR DAMAGE TO PROPERTY
and LOSS RESULTING FROM
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Policies Guaranteed by THE
HARTFORD STEAM BOILER
INSPECTION AND INSURANCE
COMPANY. :: :: ::

Assets for Security of Policy-
holders, \$4,552,020.43. :: ::

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A. E. EDKINS - - - Ass't Chief Engineer

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Calgary, Alta.

Contractors are figuring on the Armoury to be erected here by the Dominion Government at a cost of \$350,000.

Medicine Hat, Alta.

At a cost of \$2,000 the Lake of the Woods Milling Company will erect an extension to their elevator.

BRITISH COLUMBIA.

Compalix, B.C.

A conflagration at Compalix on April 6th, destroyed fourteen million feet of lumber, machine shops, warehouse, a hotel, 17 houses, a steamer, and other property to the total value of over \$300,000. The lumber was the property of the Forest Mills of British Columbia. It is believed the fire was of incendiary origin.

Howard G. White, Peruvian Consul to Canada, has been appointed by the provincial government as special commissioner to South America and will proceed immediately to the west coast of South America with full information regarding British Columbia products, including lumber, canned fish and manufactured goods.

Kamloops, B.C.

Hydro-Electric By-laws aggregating the sum of \$85,000 were voted upon on April 6th, passing with a large majority. This money will be used for completing the Hydro-Electric system upon which half a million dollars has been expended. The City anticipates great results through their fine power plant, which it is expected will be in operation in course of a few weeks.

Kelowna, B.C.

D. W. Sutherland of this town is contemplating a broom factory here.

New Westminster, B.C.

A site has been leased on the waterfront for the erection of a gasoline supply station for the Imperial Oil Company.

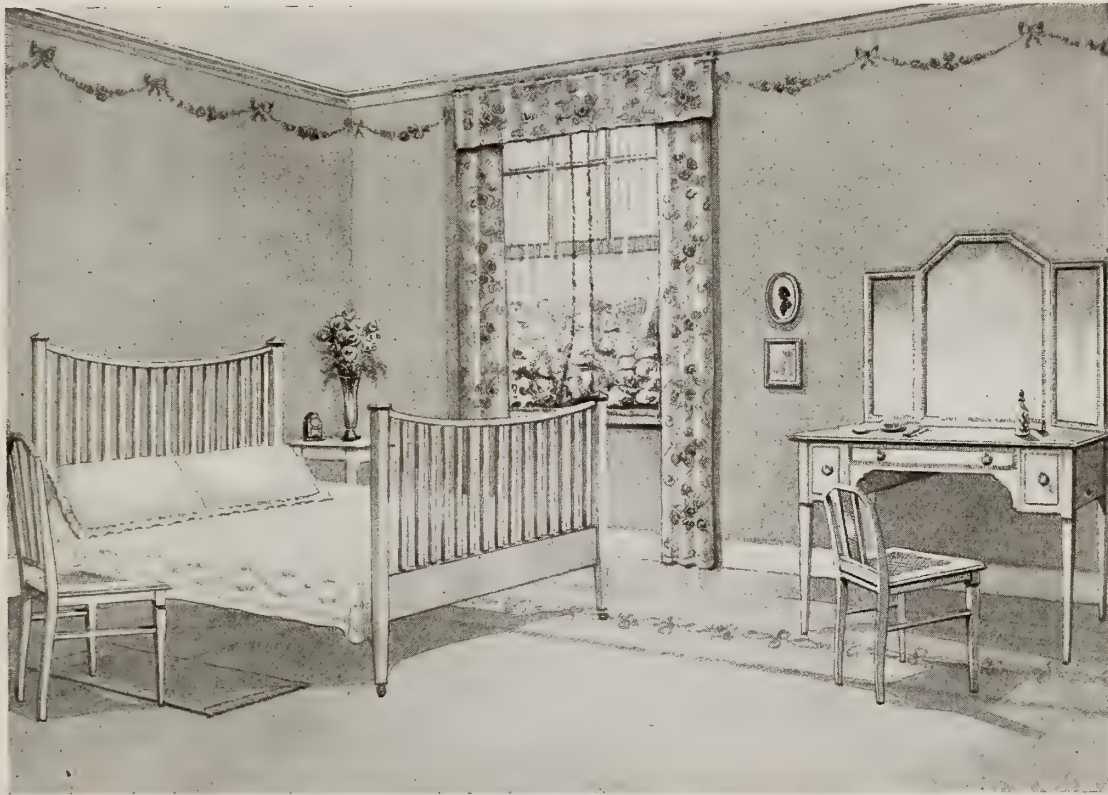
The British Columbia Packers, Ltd., is installing a new can-making plant at their Imperial Cannery, New Westminster.

Arrangements are being made for an early start on the construction of the new elevator for the Brackman-Ker Milling Company.

The British Columbia Manufacturing Company, Ltd., of New Westminster have secured a contract for the shipment of 35,000 cases for oil tins to be shipped monthly to Australia. This large order previously was supplied from American sources. The extra work entailed necessitates the running of the works, which employ one hundred hands, on day and night shifts.

APPROPRIATE FURNITURE FOR SUMMER HOMES

Made by the Toronto Furniture Company



From a sketch made by the design department of the Toronto Furniture Company.



MADE RIGHT
IN CANADA

AS IS EVIDENT from the illustration here, the Bungalow Bed is splendidly adapted to the arrangements of the summer home—or for homes less temporary in character. Patterned after a popular 18th century English design, it is to be admired quite as much for its good looks as for its sturdy, sensible construction and easy, comfortable lines. There is nothing fancy about the bed, and there is nothing fancy about the price. If you are interested, we shall be pleased to mail photo-prints and the name of your nearest dealer. Besides white enamel, the Bungalow Bed comes in fumed or Early English oak and mahogany.

Representative Canadian firms who sell and recommend our furniture:

Brantford Charles Duncan & Sons.
M. E. Long Furnishing Co.
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Nova Scotia Furnishing Co.
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Lindsay Anderson & Nugent.

London Ontario Furniture Co.
Smallman & Ingram.
Ottawa Harris & Barry.
S. A. Luke.
Stewart & Co.
Peterboro Cressman & Co.
Montreal The G. A. Holland & Son Co.
H. P. Labelle & Co.
Henry Morgan & Co., Limited.
N. G. Valiquette Limited.
Niagara Falls .. M. H. Buckley & Co.
Sherbrooke Edwards Furniture Co.
The MacCaw-Bissell Furniture Co.
Sudbury J. G. Henry.
St. Catharines .. McLaren & Co.
St. John, N.B. .. A. Ernest Everett.

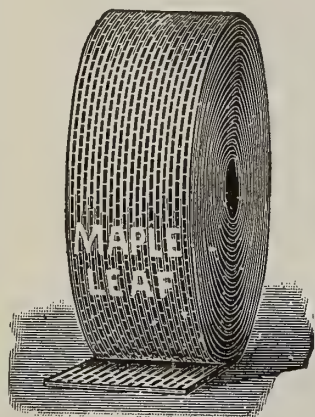
St. Thomas Baldwin & Robinson.
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**"Maple Leaf"
Brand
Stitched
Cotton Duck
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DOMINION BELTING CO. Limited
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MORTON, PHILLIPS & CO.

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Stationers, Blank Book Makers
Printers and Publishers of Commercial
Tables, Etc.

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Executive Offices : Nos. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying, and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices. CORRESPONDENCE INVITED.

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Toronto, Ont.
Winnipeg, Man.

London, Ont.
Quebec, Que.
Vancouver, B.C.
Calgary, Alta.

THOS. C. IRVING, Gen. Man. Western Canada, Toronto

Okanagan Valley, B.C.

Youngheart and Company of Montreal are undertaking the growing of an extensive crop of tobacco this year in the Okanagan Valley, arrangements being made for the planting of 250 acres leased by the company, and as much more as individual ranchers care to grow.

Prince Rupert, B.C.

Chicago capitalists propose to establish a cement works near Prince Rupert, and have recently been on the ground securing final data. It is stated that the wet process of manufacture will be employed.

Vancouver, B.C.

E. B. MacMaster has taken over the business of W. J. MacMaster and Sons, Ltd., Vancouver, in liquidation, and will continue the manufacture of shirts, overalls, etc.

An order has been received from an English railway company for the shipment of four million fir ties, provided shipment can be effected. The ties are available, but so far it has been impossible to secure bottoms for shipment.

A syndicate of lumber mills are in communication with the British War Office in reference to the supply of a large quantity of lumber cut to dimensions for ready-made houses. The matter is at present under advisement and indications are good for the early placing of a large contract. British Columbia mills, in general, are busier than for some time past, and a number of the logging camps have opened up again.

The Eagle Harbour Canning Company of Vancouver has purchased the site of the old Eagle Harbour cannery on Howe Sound which was burned down a few years ago. The company will build an up-to-date cannery.

The Wallace Fisheries will can herring at their Alberni plant the coming fall. One pound oval cans kippered, and also one pound cans packed with tomato sauce will be put up. This is the first organized attempt to market British Columbia herring in cans, and it is expected the business will extend rapidly.

Victoria, B.C.

Representatives of eastern interests have been on the coast some time in connection with projected works for the manufacture of calcium cyanamide and calcium nitrate by electrolytic fixation of atmospheric nitrogen. It is stated the probable location of the plant will be on Vancouver Island, where extensive water power is available for the production of the requisite electric power at low cost.

Orders have been placed by the War Office with some fifteen to twenty engineering shops in Vancouver, Victoria and New Westminster for 50,000 eighteen-pounder shells for delivery as soon as possible. 20,000 will be made in Victoria and the balance on the mainland. The steel will be supplied by the shell committee and the turning, polishing, sand-blasting and pressing on copper bands will be completed in the west. After local examination by government examiners, the shells will be shipped east for final inspection.



Cut of 50-inch "Extra" Double Belt

Made by The J. C. McLaren Belting Co., Limited.

WE ARE HEADQUARTERS FOR
ALL KINDS OF

BELTING
LACE LEATHER
CARD CLOTHING
REEDS AND
GENERAL
MILL SUPPLIES

ABSOLUTE SATISFACTION GUARANTEED

The J. C. McLaren Belting Co., Limited

ESTABLISHED 1856

Head Office and Factory
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LEATHER BELTING

MADE IN CANADA

J. L. Goodhue & Company

LIMITED

DANVILLE - - - QUEBEC

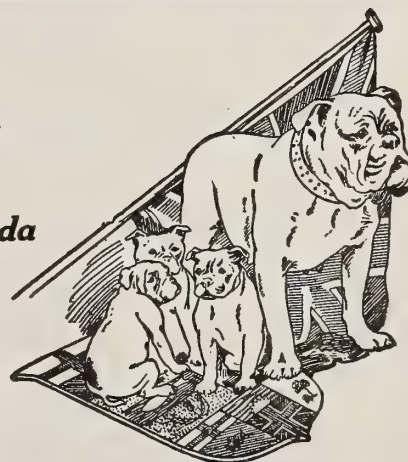
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SUPERIOR QUALITY LEATHER
BELTING AND LACE LEATHER

Quality NOT PRICE
OUR AIM

Canadian Manufacturers
SHOULD USE Canadian Belting

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in
Canada



From
British
Stock

"GENUINE OAK"
LEATHER BELTING

"D.K."
BALATA BELTING

Guaranteed to Give Satisfaction

D. K. McLAREN LIMITED

TORONTO MONTREAL ST. JOHN, N.B.
847 Beatty Street, VANCOUVER
Engineer's Supply Co., 123 Bannatyne Ave. E., WINNIPEG



MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER

Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED

450 BARTON ST. EAST

Hamilton :: :: :: Ontario

ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

**NEW PROCESS GEARS
RAWHIDE PINIONS**

They last indefinitely too.

Ask us about it.

R. GARDNER & SON, LIMITED

Nazareth, Brennan and Dalhousie Streets
MONTREAL

ONTARIO.

Amherstburg, Ont.

The Kemp Furniture Company contemplate an addition to their factory.

Brussels, Ont.

The erection of a fireproof flour mill to replace that which was recently destroyed by fire is being considered by Pryne and Son.

Brantford, Ont.

An extension costing \$20,000 will be made to the Brantford Computing Scale Company.

A permit has been taken out by Schultz Bros. for the erection of a dry kiln at their planing factory. Estimated cost will be \$3,000.

The plant of Westrumite, Limited, which has been taken over by the Canadian Westrumite Company, recently organized, will shortly commence operation at the local plant which will be considerably enlarged and improved.

The contract for the erection of a factory for the Brantford Computing Scale Company, Limited, has been let to P. H. Secord & Sons, Limited, at \$13,000. Contracts for heating, plumbing and electrical work have not yet been let.

The addition which the Brantford Cordage Co., Limited, built to their plant last year increased their output to such an extent that they are contemplating a further extension to their warehouses in the near future.

Corbett, Ont.

Plans are being prepared for the erection of creamery buildings for the Corbett Dairy Company.

Dundas, Ont.

It is announced that the Canadian Hart Wheel Company of Hamilton, may begin the construction of a plant here in the near future.

Goderich, Ont.

J. Ransford, of the Goderich Salt Company, proposes to install a modern salt plant here and increase the output to over double the present capacity.

Hamilton, Ont.

Additions to the amount of about \$100,000 will shortly be made to the plant of the Grasselli Chemical Company.

The annual report of the National Steel Car Company, Limited, states that the Company has at present over \$3,000,000 worth of orders on its books, much of which is destined for the British and French Governments.

Lindsay, Ont.

Horn Bros. industrial proposition was discussed at a meeting held on April 8. The company propose to erect a \$55,000 factory and install \$75,000 worth of machinery. Building will be commenced on October 1st.

Picton, Ont.

The canning factory owned by Mr. Edward McCaw, has been destroyed by fire.



By Royal Warrant

“Canadian Club” Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

Distilled and Bottled by

HIRAM WALKER & SONS
LIMITED

Walkerville, Canada

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We Are Ready for War

Can supply every Canadian Manufacturer and Jobber with their entire requirements of Steel and Brass Compression GREASE CUPS, Plain, Ratchet or Leather Washer Types, any finish desired. Also all styles of Oil Hole Covers.

A NEW ONE



Hinge Lid Pressed Brass Oil Cup

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Port Arthur, Ont.

A permit has been given for the erection of a \$25,000 blacksmith and forging plant at the yard of the Western Dry Dock and Shipbuilding Co., Limited.

Schumacher, Ont.

Timber is on the ground for the construction of a mill on the Schumacher Syndicate property.

Stratford, Ont.

A plant will probably be established here by the Bartlett Motor Company of Toronto. A by-law is to be submitted to the ratepayers.

Thorold, Ont.

The Exolon Company will erect a steel and brick addition to their factory at a cost of \$20,000. The addition will require 1,200 extra horse-power.

Tilbury, Ont.

A number of contracts have been closed by the Canadian Top Company, and it is expected that the factory will be running full time this month.

Toronto, Ont.

Messrs. Darling and Pearson have been instructed by the C.P.R. to draw plans for a new station at North Toronto, the estimated cost of which is \$200,000.

The St. Clair Foundry Company have obtained a permit for the erection of an addition to their plant at a cost of \$2,000.

The estimates of the Dominion Department of Public Works, which passed in the House on April 3rd, included over \$1,000,000 for a new post office to be erected in Toronto.

The David Smith Lithographing Company has bought a factory building at the corner of Strickland and Noble Streets.

QUEBEC.

Beebe, Que.

Walter Brown's sash and door factory, recently destroyed by fire, will shortly be rebuilt.

Montreal, Que.

Contracts for the erection of three large oil tanks have been awarded by the Asphalt and Supply Company, Limited, of this city; these are intended for the storage of fluxes, asphaltic road oils, etc. The building of these storage facilities by the Asphalt and Supply Company is thought to be the first step toward a refinery here.

Sherbrooke, Que.

A committee has been appointed by the Board of Trade to look into the advisability of sending a representative to London for the purpose of securing orders for the steel and iron industries of Sherbrooke.

The city council have agreed to the terms of the lease between the City of Sherbrooke and Julius Kayser & Company, the New York silk glove manufacturers, who are establishing a branch of their business here.

St. Bazile, Que.

Leger L. Hardy, St. Bazile de Portneuf, Que., has just completed the addition of a department to his factory for the manufacture of high-grade brooms for factories, mills and railroads.

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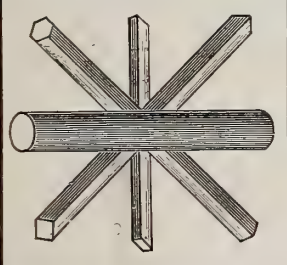
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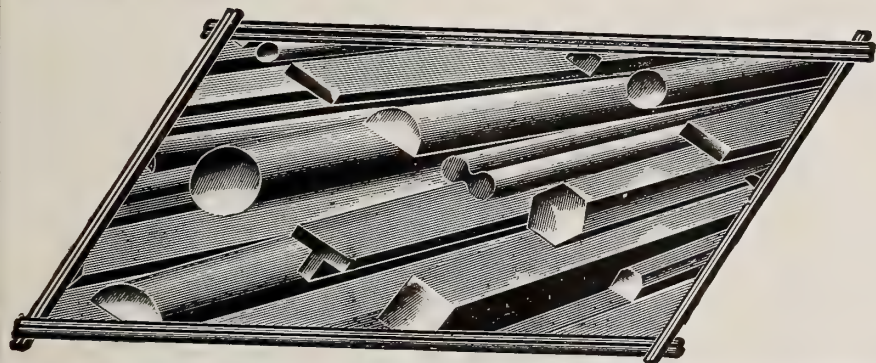
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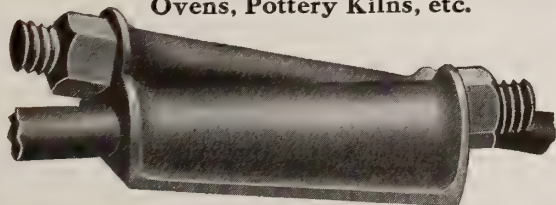
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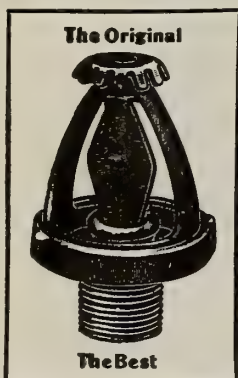
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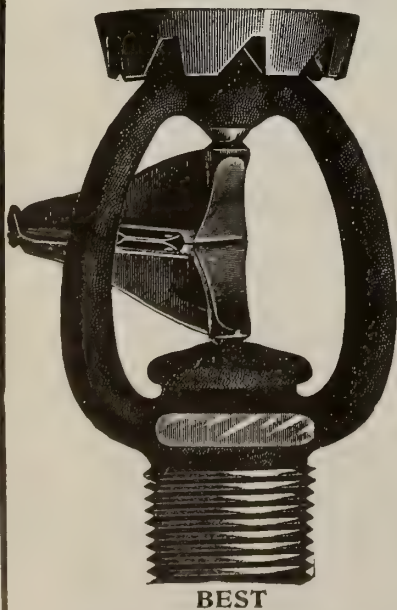
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St. Bonaventure de Upton, Que.

The grist, carding, lathing and saw mills of Messrs. Benoit & Fils have been destroyed by fire. All buildings will be re-erected and machinery, including gas and steam engines, steam heating plant, etc., will be required.

St. Lambert, Que.

The factory of the Quebec Preserving Company, which was recently destroyed by fire, will be rebuilt and new machinery will be required.

Valleyfield, Que.

A by-law to grant an additional bonus to Berman Bros. & Company to establish a clothing factory has been passed.

Westmount, Que.

Ogdensburg Coal & Towing Company have applied for permission to build a coal pocket on Hillside Avenue, at a cost of \$10,000.

SASKATCHEWAN.

Melfort, Sask.

The Canada West Grain Company, whose headquarters are in Melfort, are making arrangements to increase their elevators from eight to ten, possibly eleven. One is to be built at Beatty, and another one will be placed at a point on the Shell Brook branch of the C.N.R., not yet decided on; if things go well a third will be built.

Regina, Sask.

The construction of a subway is under contemplation under the C.P.R. tracks at Hamilton Street. It will probably be proceeded with this year.

Saskatoon, Sask.

The Saskatoon factory of Marshall Sons & Company, of Gainsborough, England, has just received an order from the Russian Government for its entire stock of 70 H.P. Gasoline Tractors.

MANUFACTURING COMMERCIAL ALCOHOL.

In view of the decision of the Saskatchewan Government to abolish the spirituous liquor trade the Agricultural and Manufacturing Committees of the Regina Board of Trade are engaged in an effort to promote the manufacture of denatured or commercial alcohol. These committees thought that the distilleries of the country could easily be used for this purpose to great advantage. The committees were of the opinion that commercial alcohol could be sold at 20c. a gallon after a good profit had resulted to the manufacturer. As denatured alcohol is manufactured from beets and potatoes, the farmer engaged in raising these vegetables would be assured of a return of over \$50 per acre. Denatured alcohol is now being used in the United States and Germany very largely as a substitute for gasoline. In the former country the retail price ranges from 18c. to 20c. per gallon, and in the latter 16c. to 24c. per gallon, according to figures secured. The Regina Board of Trade is of the opinion that the manufacturing of commercial alcohol would overcome the unemployment resulting from the closing of the hotel bars.



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BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCOUNTING FORMS

- Business Systems, Limited.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS

- *The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL

- The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- *Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE

- E. L. Drewry, Winnipeg, Man.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS

- *Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS

- *The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS

- *T. Pringle & Sons, Montreal.

ASBESTOS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR

- Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES

- *Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
- *Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES:

- *Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS

- *Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton

- Hamilton Cotton Co., Hamilton, Ont.

AWNINGS

- *Smart-Woods, Ltd., Montreal.

AXLES

- Canada Forge Co., Ltd., Welland, Ont.
- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Limited, Port Hope, Ont.
- *The Canada Metal Co., Toronto.
- *Tallman Brass & Metal Co., Hamilton.

BACON

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS

- *Scythes & Co., Ltd., Toronto.
- *Smart-Woods, Ltd., Montreal.

BAGS, Cotton

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Ltd., Montreal, Que.

- *Scythes & Co., Ltd., Toronto.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal, Que.

- Lamontagne, Ltd., Montreal, Que.
- The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN

- *Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:

- *Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS

- *The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS AND CAGES:

- *Canada Wire and Iron Goods Co., Hamilton.
- *Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS

- *Tallman Brass & Metal Co., Hamilton.

BARs, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARs, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Toronto.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- The Canadian National Carbon Co., Ltd., Toronto.
- Canadian Carbon Company, Ltd., Toronto.

BEARINGS:

- *The Chapman Double Ball Bearing Co., Ltd., Toronto.
- The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze

- *Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and up-right

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding

- *Otterville Mfg. Co., Ltd., Otterville, Ont.
- *Smart-Woods, Ltd., Montreal.

BEEF

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER

- E. L. Drewry, Winnipeg, Man.

BELTING, chains.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto.

- *J. L. Goodhue & Co., Danville, P.Q.

- *Sadler & Howarth, Montreal.

- *The D. K. McLaren Belting Co., Ltd., Montreal.

- *The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- *Gutta Percha & Rubber, Limited.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES

- *Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS

- Samuel May & Co., Toronto.

BINDERS, loose leaf

- Business Systems, Limited.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:

- *A. C. Leslie & Co., Montreal.

BLANK BOOKS:

- Business Systems, Limited.
- *Morton, Philips & Co., Montreal.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

- *Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS:

- *The Canadian Sirocco Co., Windsor, Ont.

- *Sheldons, Ltd., Galt.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS

- *Canadian H. W. Johns-Manville Co., Toronto.

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.

- *M. Beatty & Sons, Ltd., Welland, Ont.

- *Goldie & McCulloch Co., Ltd., Galt, Ont.

- John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

- *Polson Iron Works, Ltd., Toronto

- J. & R. Weir, Montreal, Que.

- Taylor-Forbes Co., Ltd., Guelph, Ont.

- *Jenckes Machine Co., Sherbrooke

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, heating:

- *The Goldie & McCulloch Co., Ltd., Galt.

- BOILERS, hot water or steam

- Warden King, Ltd., Montreal, Que.

BOILERS, steam.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

- Steel and Radiation Ltd., Toronto

- Warden King, Ltd., Montreal, Que.

- *The Watrous Engine Works Co., Ltd., Brantford.

- BOILERS, steam and brass work:

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

BOILER STANDS

- Anthes Foundry Ltd., Toronto.

BOLSTERS

- *Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:

- *The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.

- *The Steel Co. of Canada, Ltd., Hamilton.

- Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS

- R. G. McLean, Toronto.

- *The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS

- Stone Limited, Toronto.

- R. G. McLean, Toronto.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,

- Ames-Holden-McCreedy, Ltd., Montreal, Que.

- J. Leckie Co., Ltd.

- The John Ritchie Co., Ltd., Quebec, Que.

BOWLING ALLEYS

- Samuel May & Co., Toronto.

BOXES, cellular board:

- *The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden

- G. & J. Esplen, Montreal, Que.

- Barchard & Co., Ltd., Toronto.

BRAIDS AND TRIMMINGS

- The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS

- *Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS

- *Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto.

- *Tallman Brass & Metal Co., Hamilton.

BRASS GOODS

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS PLATES

Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS

Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.

Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Watrous Engine Works Co., Ltd., Brantford.

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National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer

National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway

Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.

*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters

Geo. Booth & Son, Toronto.

BROOMS

H. W. Nelson & Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:

Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUILDING

Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed

Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:

*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE

McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship

*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS

The Canadian Bag Co., Ltd., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:

*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:

*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, wire

The Dominion Wire Rope Co., Ltd., Montreal.

*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS, ADVERTISING NOVELTIES, etc.

Rolph & Clark, Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CAMERAS

Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS

Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOEES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin

A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty

A. R. Whittall, Montreal.

CANVAS

*Scythes & Co., Ltd., Toronto.

*Smart-Woods, Ltd., Montreal.

CAPS, cloth

John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES

Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS

Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light

Canadian Carbon Co., Ltd., Toronto.

The Canadian National Carbon Co., Ltd.

CARBONS, flame

Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS

Canadian Carbonate Company, Limited, Montreal.

CARBIDE of CALCIUM

Canada Carbide Co., Ltd., Montreal, Que.

CARDBOARD

Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Axminster and ingrain

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

CARRIERS, box and barrel

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

CARRIERS, brick

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

*Jeffrey Mfg. Co., Montreal, Que.

*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

CARS, industrial:

*Sheldons, Ltd., Galt.

CARTONS, lithographed

Harris Lithographing Co., Toronto.

CASTINGS:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:

*Tallman Brass & Metal Co., Hamilton.

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass and bronze:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.

*Dodge Mfg. Co., Toronto.

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Record Foundry and Machine Co., Moncton, N.B.

Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:

*Galt Malleable Iron Co., Ltd., Galt, Ont.

*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:

*Canadian Steel Foundries, Ltd., Montreal.

Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

Grip, Ltd., Toronto.

R. G. McLean, Toronto.

CAUSTIC SODA

Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS

Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

*The Grasselli Chemical Co., Ltd., Toronto.

*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS

The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM

Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS

Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO

Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel

The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS

*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS

The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S

*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS

*Canadian H. W. Johns-Manville Co., Toronto.

*Goderich Organ Co., Goderich, Ont.

CLOTHING

John W. Peck & Co., Ltd., Montreal, Que.

MacKenzie & Co., Ottawa, Canada.

*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

CLUTCHES.

*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

Standard Fuel Co., Toronto.

GOATS

Peerless Overall Co., Rock Island, Que.

COBALT OXIDE

The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS

Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE

S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers

C. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:

*Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

SOLD DRAWN SHAPES, flats, squares and hexagons:

*The Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

The Arlington Co., of Canada, Ltd., Toronto.

COLLARS

The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen

Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof

Williams, Greene & Rome, Berlin, Ont.

COLOES

Brandram-Henderson Ltd., Montreal, Que.

A. Ramsay & Son Co., Montreal, Que.

Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name

The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS

Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:

*Brown Bros., Ltd., Toronto.

*Morton, Phillips & Co., Montreal.

CONCENTRATORS:

*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.

The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING

*Conduits Company, Ltd., Toronto.

CONFECTIONERY

Ganong Bros., Ltd., St. Stephens, N.B.

Moirs, Limited, Halifax, N.S.

The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:

*Dodge Mfg. Co., Ltd., Toronto.

*Jenckes Machine Co., Sherbrooke.

COOLING APPARATUS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS

*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE

Canadian Seamless Wire Co., Ltd., Toronto.

CORKS

S. H. Ewing & Sons, Montreal, Que.

CORK CARPET

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:

*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS

Dominion Corset Co., Quebec, Que.

COTTONADES

Hamilton Cotton Co., Hamilton, Ont.

COUPLERS

*Canadian Steel Foundries, Ltd., Welland, Ont.

COUPLINGS:

*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS

Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS

De Laval Dairy Supply Co., Ltd., Montreal, Que.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:

*The Dominion Creosoting Co., Ltd., Vancouver, B.C.

CRUSHED STONE

The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:

*Jenckes Machine Co., Sherbrooke.

CUES

Samuel May & Co., Toronto.

CUFFS

The Standard Shirt Co., Ltd., Montreal, Que.

CUPOLAS,

*Sheldons, Ltd., Galt.

CUPS, presentation

Standard Silver Co., Toronto.

CUPS, grease and oil

*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR

Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille

Hamilton Cotton Co., Hamilton, Ont.

CUTLERY

Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS

Hamilton Cotton Co., Hamilton, Ont.

DERAILS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS

Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.

Grip, Ltd., Toronto.

DINING ROOM SUITES

The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES

*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS

Spramotor Co., London, Ont.

DOOR HANGERS

*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS

Daly & Morin, Montreal, Que.

DREDGES

*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt

Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS

J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES

London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:

*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric

Canadian Carbon Co., Ltd., Toronto.

DRY COLORS

P. D. Dods & Co., Ltd., Montreal, Que.

The Imperial Varnish & Color Co., Ltd., Toronto.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS

Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE

The Dominion Wire Rope Co., Ltd., Montreal.

DYERS AND FINISHERS

R. Parker & Co., Toronto.

DYNAMITE

Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating

*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN

Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

ELECTRICAL COMPOUNDS

Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.

*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE

Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES

Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING

Central Press Agency, Toronto.

ELECTRICAL SUPPLIES

*Canadian Westinghouse Co., Ltd., Hamilton.

*Jones & Moore Electric Co., Ltd., Toronto.

ELECTRO-SILVER PLATED WARE

Standard Silver Co., Toronto.

ELEVATORS:

*Jenckes Machine Co., Sherbrooke

Turnbull Elevator Mfg. Co., Toronto.

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS

Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS

*The Geo. B. Meadows, Toronto

Iron and Brass Goods Works Co., Ltd., Toronto.

ELEVATORS, hydraulic and electric John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

EMERY DRESSERS and STANDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS

R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE

McClary Mfg. Co., London, Ont.

ENGINES

*The Canadian Sirocco Co., Windsor, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

J. & R. Weir, Montreal, Que.

*Polson Iron Works, Ltd., Toronto.

*Sheldons, Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasoline

Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Massey-Harris Co., Ltd., Toronto

ENGINES, gasoline tractor plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting

*M. Beatty & Sons, Welland.

*Watrous Engine Works Co., Ltd., Brantford.

ENGINES, steam plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

Rolph & Clark, Ltd., Toronto.

Stone, Limited, Toronto.

ENGRAVERS, half-tone

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate

American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote

American Bank Note Co., Ottawa, Ont.

ENGRAVING:

*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate

Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSIAGE AND STRAW CUTTERS

J. Fleury's Sons, Aurora, Ont.

ENVELOPES

Barber-Ellis Co., Ltd., Toronto.

Canada Envelope Co., Montreal, Que.

ENVELOPES, transos

Business Systems, Limited.

EXCELSIOR PADS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR

Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS

Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES

Ridout & Maybee, Toronto.

EXPLOSIVES, high Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS

Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery

De Laval Dairy Supply Co., Ltd., Montreal, Que.

J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:

*The Canadian Sirocco Co., Windsor, Ont.

*Sheldons, Ltd., Galt.

FASTENERS, belt

*Sadler & Haworth, Montreal, Que.

FENCES and GATES:

*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire

Banwell Hoxie Wire Fence Co., Hamilton, Ont.

*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire

The Great West Wire Fence Co., Ltd., Winnipeg, Man.

C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAIS:

*The E. B. Eddy Co., Ltd., Hull.

FILES

Henry Disston & Sons, Ltd., Toronto.

*The Nicholson File Co., Port Hope, Ont.

FIRE DOOR HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:

*Watrous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:

*Canada Wire and Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS

*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.

*Canadian H. W. Johns-Manville Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS

*Watrous Engine Works Co., Ltd., Brantford.

FIRE HOSE

*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.

Dunlop Tire and Rubber Goods Co., Limited, Toronto.

*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*Eureka Mineral Wool & Asbestos Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS

*Pedlar People Ltd., Oshawa, Ont.

FIRE SPRINKLER SYSTEMS.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.
The Garth Co., Montreal, Que.

FISH. Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.**FITTINGS FOR SOIL PIPE**

Anthes Foundry, Ltd., Toronto.

FITTINGS, steam

Warden King, Ltd., Montreal, Que.

FLAGS

*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

FLASHLIGHTS

Canadian Carbon Co., Toronto.

FLOORING, hardwood

Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS

Standard Clay Products, Ltd., St. Johns, Que.

FORGES:

*Sheldons, Ltd., Galt.

FORGINGS

Canada Forge Co., Ltd., Welland, Ont.
*The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP

*Dominion Stamping Co., Walkerville, Ont.

FOUNTAIN FRUITS and Juices

J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:

*Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS, manganese

Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL

Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's

Holt, Renfrew, Ltd., Quebec.

FUR GOODS

John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons

J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES

Gurney Foundry Co., Ltd., Toronto.
McClary Mfg. Co., London, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air

Bedford Stove Co., Bedford, Que.

FURNITURE, hall

The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office

The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan

Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:

*A. C. Leslie & Co., Montreal.

GALVANIZERS

Acme Stamping & Tool Works Ltd., Hamilton, Ont.
*Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES

*Ontario Wind & Pump Co., Ltd., Toronto.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES

*The Watrous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine

Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground

S. F. Bowser & Co., Toronto.

GASOLINE

*The Imperial Oil Co., Ltd., Toronto.

GENERATORS:

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

GINS

The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE

Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut

Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS

Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS

Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror

Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS

A. R. Clarke & Co., Ltd., Toronto.

GLUE

Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE

Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS

Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)

J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE

J. J. McLaughlin, Ltd., Toronto.

GRATES.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:

*Canadian Hart Wheels, Ltd., Hamilton, Ont.
*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES

*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES

The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS

B. J. Coghlin Co., Ltd., Montreal.

GYPSPUM, crushed

*Albert Mfg. Co., Hillsborough, N.B.

GYPSPUM PRODUCTS

*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE

The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS

F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.

*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.
Taylor-Forbes Co., Ltd., Guelph, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING

Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH

Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL

Wilson Bros., Ltd., Collingwood, Ont.

HARNESSES

Lamontagne Ltd., Montreal, Que.

HATS, men's straw

The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw

The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver

The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw

Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope

The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS

*The Canadian Sirocco Co., Windsor, Ont.
*Watrous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:

*The Goldie & McCulloch Co., Ltd., Galt.

HEATING APPLIANCES:

*Sheldons, Ltd., Galt.

HEATING SYSTEMS

Gurney Foundry Co., Ltd., Toronto.

HESSIANS

The Canadian Bag Co., Ltd., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

*Smart-Woods, Ltd., Montreal.

HINGES:

*The Steel Co. of Canada, Ltd., Hamilton.

HOISTS

*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.

*M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.

*M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial

Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Limited.

HUMIDIFIERS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES

Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INCUBATORS & BROODERS

Lee Mfg. Co., Ltd., Pembroke, Ont.

INDEX CARDS

Business Systems, Limited.

INJECTORS, automatic and autopoitive

Penberthy Injector Co., Ltd., Windsor, Ont.

INSULATION, patent seamless cork

*Canadian H. W. Johns-Manville Co., Toronto.
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING

*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS

Standard Clay Products, Ltd., St. Johns, Que.

IRON:

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar

Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.

*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural

*Canada Wire & Iron Goods Co., Hamilton.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental

*Canada Wire & Iron Goods Co., Hamilton.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY

A. R. Whittall, Montreal.

JAM, canned goods, etc.

E. D. Smith & Son, Limited.

JAPANS, enamels, etc.

A. Muirhead Co., Ltd., Toronto.

JOINTERS:

*Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER

S. H. Ewing & Sons, Montreal, Que.

JEWELRY, enamelled souvenir

Caron Bros., Montreal, Que.

JEWELRY, gold filled

Caron Bros., Montreal, Que.

JOIST HANGERS

*Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR

The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:

*Sheldons, Ltd., Galt.

KINDLING

Standard Fuel Co., Toronto.

KNIFE GRINDERS:

*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:

*Penman's, Ltd., Paris, Ont.

KNIVES

Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.
Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper

Henry Disston and Sons, Toronto, Ont.
The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

Canadian Kodak Co., Ltd., Toronto.

LABELS

Lawson & Jones Ltd., London, Ont.

LABELS, lithographed

Harris Lithographing Co., Toronto.

LACE LEATHER

F. C. McCordick, St. Catharines, Ont.

*Sadler & Haworth, Montreal, Que.

*The D. K. McLaren Belting Co., Ltd., Montreal.

*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step

*Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER

E. L. Drewry, Winnipeg, Man.

- LARD**
F. W. Fearman Co., Ltd., Hamilton, Ont.
- LATH**
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
- LATHE CHUCKS**
Ker & Goodwin, Brantford, Ont.
- LATHE-DOGS:**
Canadian Billings & Spencer Ltd., Welland.
- LAUNCHES**
Peterboro Canoe Co., Ltd., Peterboro, Ont.
- LAWN MOWERS**
Taylor-Forbes Co., Ltd., Guelph, Ont.
- LAWN SWINGS**
Stratford Mfg. Co., Ltd., Stratford, Ont.
- LAVATORIES, enameled**
Amherst Foundry Co., Ltd., Amherst, N.S.
- LAUNDRY SINKS**
Amherst Foundry Co., Ltd., Amherst, N.S.
- LEAD**
*The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.
- LEAD GRINDERS**
Benjamin Moore & Co., Ltd., Toronto.
- LEAD SHEET**
Toronto Plate Glass Importing Co., Ltd., Toronto.
- LEAD PIPE**
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.
- LEATHER**
The Robson Leather Co., Ltd., Oshawa.
- LEATHER, bookbinders'**
Clarke & Clarke, Ltd., Toronto.
- LEATHER, fancy**
Clarke & Clarke, Ltd., Toronto.
- LEATHER GOODS**
Lamontagne, Ltd., Montreal, Que.
- LEATHER, hemlock sole**
The Breithaupt Leather Co., Ltd., Berlin, Ont.
- LEATHER, patent colt and side leather**
A. R. Clarke & Co., Ltd., Toronto.
- LEATHER, sheep skin, etc.**
Clarke & Clarke, Ltd., Toronto.
- LEATHER, upholstering.**
Clarke & Clarke, Limited, Toronto.
- LEATHER, upper**
A. Davis & Son, Ltd., Kingston, Ont.
- LINK BELTING.**
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- LINOLEUM**
Dominion Oil Cloth Co., Ltd., Montreal, Que.
- LITHOGRAPHED BUSINESS STATIONERY**
Business Systems, Limited.
- LITHOGRAPHED TIN WARE:**
*MacDonald Mfg. Co., Ltd., Toronto.
- LITHOGRAPHERS**
American Bank Note Company, Ottawa, Ont.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.
- LOCKERS:**
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.
- LOCOMOTIVE BLOCKS**
Standard Clay Products, Ltd., St. Johns, Que.
- LOCOMOTIVES, industrial**
*Montreal Locomotive Works, Ltd., Montreal.
- LOCOMOTIVE & MARINE BRASS WORKS**
The James Morrison Brass Mfg. Co., Ltd., Toronto.
- LOOSE LEAFS, BINDERS AND FORMS**
Business Systems, Limited.
- LOOSE LEAF SYSTEMS**
Copeland-Chatterson Co., Ltd., Toronto.
- LOOSE LEAF SUPPLIES**
The Esdale Press, Ltd., Edmonton.
- LUBRICATORS, steam sight feed**
Penberthy Injector Co., Ltd., Windsor, Ont.
- LUGS, for silos and water tanks**
*Otterville Mfg. Co., Ltd., Otterville, Ont.
- LUMBER**
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.
- LUMBER, asbestos:**
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
- LUMBERING BLANKETS.**
Slingsby Mfg. Co., Ltd., Brantford, Ont.
- LUMBER, decking and planking**
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).
- LUMBER, Douglas fir (Oregon pine)**
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.
- LUMBER, long timbers and spars**
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.
- LUMBER, pickets and lath**
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.
- LUMBER, red pine and spruce**
Gillies Bros., Ltd., Braeside, Ont.
- LUMBER, spruce, fir, larch and cedar**
Ferne Lumber Co., Ltd., Fernie, B.C.
- LUMBER, staves and heading**
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.
- LUMBER, white pine**
Gillies Bros., Ltd., Braeside, Ont.
- MACHINE TOOLS**
*John Bertram & Sons Co., Ltd., Dundas, Ont.
- MACHINERY, brick:**
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.
- MACHINERY, conveying.**
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
- MACHINERY, elevating.**
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.
- MACHINERY, flour mill:**
*The Goldie & McCulloch Co., Ltd., Galt.
- MACHINERY, grinding**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- MACHINERY, hoisting, etc.**
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto
J. & R. Weir, Montreal, Que.
*M. Beatty & Sons, Ltd., Welland, Ont.
- MACHINERY, ice cream**
J. J. McLaughlin, Ltd., Toronto.
- MACHINERY, iron working**
*John Bertram & Sons Co., Ltd., Dundas, Ont.
- MACHINERY, pulp mill**
*The Watrous Engine Works Co., Ltd., Brantford.
- MACHINERY, pumping**
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Watrous Engine Works Co., Ltd., Brantford.
- MACHINERY, punching and shearing**
*John Bertram & Sons Co., Ltd., Dundas, Ont.
- MACHINERY, railroad and car shop**
*John Bertram & Sons Co., Ltd., Dundas, Ont.
- MACHINERY, roadmaking**
Sawyer-Massey Co., Ltd., Hamilton Ont.
- MACHINERY, sawmill**
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene Ont.
W. P. Plant, Hastings, Ont.
*Watrous Engine Works Co., Ltd., Brantford.
- MACHINERY, special**
Bawden Machine Co., Ltd., Toronto.
- MACHINERY, tannery**
W. P. Plant, Hastings, Ont.
- MACHINERY, transmission**
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.
- MACHINERY, wood working**
*Berlin Machine Works, Ltd., Hamilton.
*The Watrous Engine Works Co., Ltd., Brantford.
- MACHINE WRENCHES:**
*Canadian Billings & Spencer, Ltd., Welland.
- MACHINES, painting**
Spramotor Co., London, Ont.
- MAGNESITE**
Canadian Carbonate Co., Ltd., Montreal, Que.
- MAILING TUBES:**
*Dominion Paper Box Co., Ltd., Toronto.
- MALT:**
*Hiram Walker & Sons, Ltd., Walkerville.
- MANTELS, wood**
W. A. Moore Co., Ltd., Meaford Ont.
- MAPS AND MAP MOUNTING**
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.
- MARTINGALE RINGS AND SLIDE LOOPS**
The Arlington Co. of Canada, Ltd., Toronto.
- MATCHERS:**
*Berlin Machine Works, Ltd., Hamilton.
- MATCHES:**
*The E. B. Eddy Co., Ltd., Hull.
- MEATS, canned**
The Wm. Davies Co., Ltd., Toronto.
- MECHANICAL DRAUGHT**
*Canadian Sirocco Co., Windsor, Ont.
- MEDICINES, patented and pharmaceutical**
Dr. Ed. Morin & Cie., Ltd., Quebec.
- METAL, babbitt**
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.
Alonzo W. Spooner, Limited, Port Hope, Ont.
- METAL CEILING:**
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.
- METAL ROOFING**
*Pedlar People Ltd., Oshawa, Ont
- METAL, spinning and stamping**
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.
- METAL SHINGLES:**
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.
- METAL SIDING:**
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.
- MILK BOTTLE CAPS**
Business Systems, Limited.
- MILK DEALERS' MACHINERY AND SUPPLIES**
De Laval Dairy Supply Co., Ltd., Montreal, Que.
- MILLBOARD, asbestos:**
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
- MILLING CUTTERS**
Pratt and Whitney Company of Canada, Dundas, Ont.
- MITTS AND GLOVES (Indian tan, red deerskins)**
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.
- MOCCASINS AND SLIPPERS (Indian tanned leathers)**
Holt, Renfrew, Ltd., Quebec, Que.
- MONUMENTS**
McIntosh Granite Co., Ltd., Toronto.
- MORTISERS:**
*Berlin Machine Works, Ltd., Hamilton.
- MOTOR CAR PARTS AND ACCESSORIES**
*Russell Motor Car Co., Ltd., Toronto.
- MOTORS:**
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.
- MOTORS, D.C.**
*Canadian Crocker Wheeler Co., St. Catharines, Ont.
- MOTORS, electric (alternating current)**
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
- MOTORS, electric (direct current)**
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
- MOTORS, electric (repairing)**
Consolidated Electric Co., Ltd., Toronto.
- MOTOR TRUCKS:**
*The Gramm Motor Truck Co., Ltd., Walkerville.
- MOULDERS:**
*Berlin Machine Works, Ltd., Hamilton.
- NAILS:**
*The Steel Co. of Canada, Ltd., Hamilton.
- NAILS, copper**
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
- NAILS, wire**
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.
- NAME PLATES**
Patterson and Heward, Toronto.
- NAPHTHA**
*The Imperial Oil Co., Ltd., Toronto.
- NICKEL OXIDE**
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
- NUTS:**
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
- OAKUM, plumbers', Canadian Navy**
Factory Waste and Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
- OAT CRUSHERS AND FLAKERS**
J. Fleury's Sons, Aurora, Ont.

OFFICE STATIONERY:

*The Montreal Lithographing Co., Ltd., Montreal.

OILS

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES

Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring

S. F. Bowser & Co., Toronto.

OIL COMPANIES

Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)

*British American Oil Co., Ltd., Toronto.

OILS, Petroleum

*The Imperial Oil Co., Ltd., Toronto.

OILCLOTHS, floor and table

Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

ORGANS

*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe

Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour

Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OSTRICH PLUMES

R. Parker & Co., Toronto.

OVENS, portable bake

Bedford Stove Co., Bedford, Que.

OVERALLS

Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS

Rosamond Woollen Co., Aumont, Ont.

OVERHEAD RUNWAYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine:

*Garlock Packing Co., Hamilton.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS

R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:

A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

The Imperial Varnish & Color Co., Ltd., Toronto.

The Staneland Co., Ltd., Victoria, B.C.

A. Ramsay & Sons Co., Montreal, Que.

Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

*Ault & Wiborg Co. of Canada, Toronto.

*The Dougall Varnish Co., Ltd., Montreal.

Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge
Standard Paint and Varnish Co. Ltd., Windsor, Ont.

The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative
Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS
Peerless Overall Co., Rock Island, Que.

PAPER BOARDS
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book
Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES
King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, envelope
Provincial Paper Mills Ltd., Georgetown, Ont.

The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, news
*The Riordon Pulp and Paper Co. Montreal, Que.

PAPER, wrapping
*The Riordon Pulp and Paper Co. Montreal, Que.

PAPERS, building
Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordon Pulp and Paper Co. Montreal, Que.

Standard Paint Co. of Canada, Ltd. Montreal.

PAPER, coated, book and label
*Ritchie & Ramsay, Ltd., Toronto

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover
*Ritchie & Ramsay, Ltd., Toronto

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board
*Ritchie & Ramsay, Ltd., Toronto

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting
*Ritchie & Ramsay, Ltd., Toronto

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes
Gummed Papers, Ltd., Brampton, Ont.

PAPER, label
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger
The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, super-book
The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, wall
Stauntons, Ltd., Toronto.

PAPER, writing
The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, writing, high-grade
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine
*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:

*Dominion Paper Box Co., Toronto.

PARK SEATS

Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES

The Geo. McLagan Furniture Co. Limited, Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION

Ridout and Maybee, Toronto.

PEAS AND BEANS FOR SEED

W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:

*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS

Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS

Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.

*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANOS, player

*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANO STOOLS AND BENCHES

*Goderich Organ Co., Goderich, Ont.

PICKLES

The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS

T. A. Lytle Co., Ltd., Toronto.

PIG IRON:

*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS, ETC.

Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges
Caron Bros., Montreal, Que.

PIPE, cast iron, for water and gas
National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:

*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:
*Eureka Mineral Wool & Asbestos Co., Toronto.

PIPES, culvert
Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized
*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer
Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings
Warden King Ltd., Montreal, Que.

PIPES AND TUBES, wrought merchant
*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines
John H. Hall & Sons, Limited Brantford, Ont.

PISTON RODS
*The Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:

*Berlin Machine Works, Ltd., Hamilton.

PLANING MILLS

G. & J. Esplen, Montreal, Que.

PLASTER OF PARIS

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land

*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:

*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS

J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:

Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES

Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain

Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence

Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS

Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES
Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES AND DIES

Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic

William R. Perrin & Co., Ltd., Toronto.

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer

William R. Perrin & Co., Ltd., Toronto.

PRINTED BUSINESS STATIONERY
Business Systems, Limited.

PRINTERS

Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:

R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING
Lawson & Jones, Ltd., London, Ont.

PRODUCE

The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES

Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS

The Wm. Davies Co., Ltd., Toronto.

PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*Jeffrey Mfg. Co., Montreal, Que.

PULP, Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
Sprimotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

RAILWAY TARIFF BINDERS
The Esdale Press Ltd., Edmonton.

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

RIVETS, bifurcated and tubular
Farmer & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURRS, iron, copper and brass
Farmer & Bulloch Co., Ltd., Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto

RULES
The Lufkin Rule Co. of Canada, Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

SADDLERY HARDWARE
*Dominion Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor, Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut and band
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
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- STEAM SHOVELS**
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- STEAM SPECIALTIES:**
*Sheldons, Ltd., Galt.
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*Canadian Sirocco Co., Windsor, Ont.
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*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- STEEL BUILDINGS**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
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*Dominion Steel Foundry Co., Ltd., Hamilton.
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*Jenckes Machine Co., Sherbrooke.
- STEEL RODS:**
*The Steel Co. of Canada, Ltd., Hamilton.
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The Corinthian Stone Co., Guelph, Ont.
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Tudhope-Anderson Co., Ltd., Orillia, Ont.
Bedford Stove Co., Bedford, Que.
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Sheet Metal Products Co. of Canada, Ltd., Toronto.
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- STOVES AND RANGES**
Bedford Stove Co., Bedford, Que.
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Lee Mfg. Co., Ltd., Pembroke, Ont.
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J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
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Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
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*The Goldie & McCullough Co., Ltd., Galt.
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Pratt and Whitney Co. of Canada, Dundas, Ont.
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- TAPES, measuring**
The Lufkin Rule Co., of Canada, Ltd., Windsor, Ont.
- TAPES, paper and cloth, gummed and ungummed**
Gummed Papers, Ltd., Brampton, Ont.
- TELEPHONE ACCESSORIES**
Canadian Independent Telephone Co., Toronto.
- TELEPHONE APPARATUS**
*The Canadian Independent Telephone Co., Ltd., Toronto.
- TELEPHONES, Automatic**
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- TENTS**
Mackenzie & Co., Ottawa, Canada.
Turner, J. J., & Sons, Peterborough, Ont.
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- TRANSFORMERS**
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
- TRANSFORMERS, power**
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.
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*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.
- TOOLS, sheet metal workers**
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- TOOLS, track**
B. J. Coghlin Co., Ltd., Hamilton, Ont.
- TRANSMISSION MACHINERY.**
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Watrous Engine Works Co., Ltd., Brantford.
- TROLLEYS.**
*Richard-Wilcox Canadian Co., Limited, London, Ont.
- TRUCKS**
The Gurney Scale Co., Hamilton, Ont.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
- TRUCKS, brick, tile and lumber**
*Watrous Engine Works Co., Ltd., Brantford.
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*The Canadian Sirocco Co., Ltd., Windsor, Ont.
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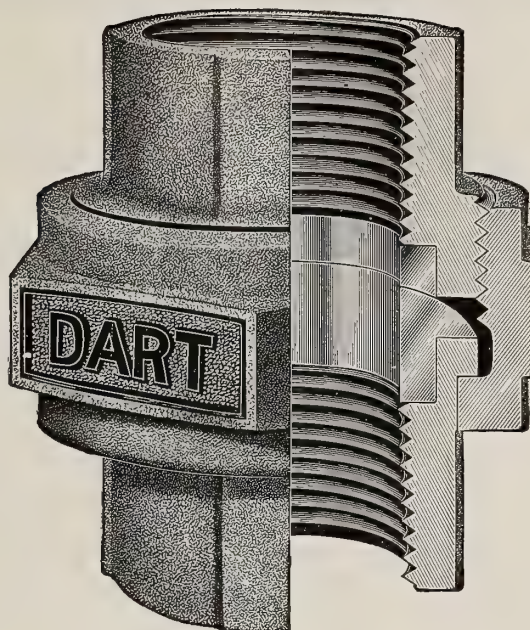
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CONTENTS

	Page		Page
Editorials	135	Tariff	151
Making the Forests Fireproof	141	BY J. R. K. BRISTOL.	
BY ROBSON BLACK.		Insurance	153
Manufacturers Meet at Montreal	145	Legislation	154
Toronto Branch Annual Meeting	146	BY F. W. WEGENAST.	
Hamilton Branch C.M.A. Annual Meeting	148	Honor Roll	156
Transportation	150	Fighting the Open Shop	160
BY J. E. WALSH.		Trade Enquiries	170
		Among the Industries	180

INDEX TO DISPLAY ADVERTISEMENTS

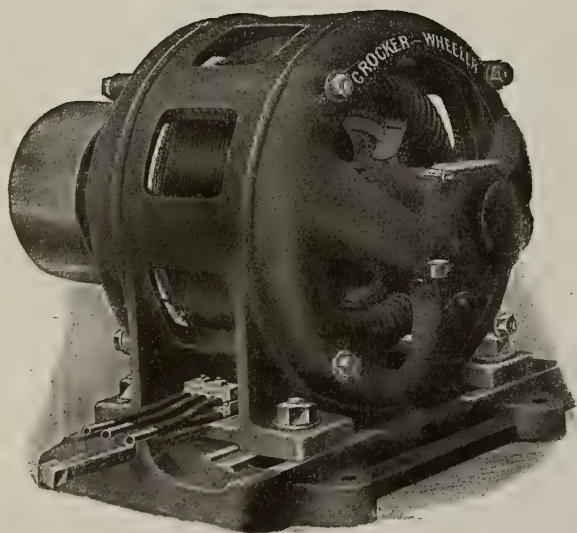
Albert Mfg. Co.	112	Canada Carbide Co., Limited	179	Canadian Street Car Advertising Co., Limited	103
Andrews, H. V.	177	Canada Metal Co., Limited	167	Canadian Tube & Iron Co., Limited.....	121
Armstrong Whitworth Co. of Canada, Ltd.	163	Canada Paper Co., Limited	126	Canadian Westinghouse Co., Limited....	133
Ault & Wiborg Co. of Canada, Ltd.	118	Canada Wire & Iron Goods Co.	111	Canadian Winkley Co., Limited	184
Banfield, W. H., & Sons	163	Canadian Appraisal Co., Limited, The...	167	Chapman Double Ball Bearing Co. of Canada, Limited	132
Beatty, M., & Sons, Limited	196	Canadian Bank of Commerce	178	Chicago Bridge & Iron Works	177
Berlin Machine Works, Limited	106	Canadian Billings & Spencer Co.	118	Clarke, A. R., & Co., Limited	112
Berry Bros.	111	Canadian Bridge Co., Limited	120	Conduits Co., Limited	187
Bertram, John, & Sons, Limited	107	Canadian Car & Foundry Co., Limited....	122	Consolidated Mining & Smelting Co. of Canada, Limited, The	131
Bird & Son	169	Canadian Consolidated Rubber Co., Ltd.			
Boiler Inspection and Insurance Co. of Canada	170	Outside Back Cover			
Boiler Inspection Department, Ontario Government	177	Canadian Crocker-Wheeler Co., Limited..	102	Dart Union Co., Ltd.	101
Booth-Coulter Copper & Brass Co., Ltd., The	196	Canadian Drawn Steel Co., Limited....	185	Dennis Wire & Iron Works	161
Bradstreets	180	Canadian Hart Wheels, Limited	182	Dodge Mfg. Co., Limited	116
British American Oil Co., Limited		Canadian H. W. Johns-Manville Co., Limited	129	Dominion Abrasive Wheel Co., Limited...	161
Inside Front Cover		Canadian National Exhibition	109	Dominion Belting Co.	180
Brown Bros., Limited	177	Canadian Oil Co.'s, Limited	196	Dominion Bridge Co., Limited	120
Butterfield & Co.	172	Canadian Pacific Railway Co.	175	Dominion Stamping Co., Limited	
		Canadian Sirocco Co., Limited	125	Inside Front Cover	

(Continued on next page.)

INDEX TO DISPLAY ADVERTISEMENTS—Continued

Dougall Varnish Co.Inside Back Cover	Kennedy, Wm., & Sons 121	Pedlar People, Limited 113
Du Pont Fabrikoid Co. 119	Kerr Engine Co., Limited, The 125	Penman's Limited 123
Eddy, E. B., Co., The 113	London & Lancashire Fire Insurance Co., Limited 163	Polson Iron Works, Limited 170
Edward Partington Paper & Pulp Co.... 128	Lysaght, John, Limited.....Inside Back Cover	Pratt & Letchworth Co., Limited..... Inside Front Cover
Elder Dempster & Co., Limited 174	Macdonald Mfg. Co. 168	Purdy, Mansell, Limited 186
Eureka Mineral Wool & Asbestos Co. ... 124	Martin Corrugated Paper & Box Co., Ltd. 128	Rapid Electrotype Co. 161
Ford Motor Co. of Canada, Limited..... 156	Massey-Harris Co., Limited 176	Richards Wilcox Canadian Co., Ltd.... 179
Galt Malleable Iron Co., Limited 123	McKenzie, The D., Machinery Co. 105	Riordan Paper Co., Limited 129
Gardner, Robert & Son 182	McKim, A., Limited 162	Roland Paper Co., Limited, The 129
Garlock Packing Co. 173	McLaren, D. K., Limited 181	Royal Bank of Canada 178
General Fire Equipment Co., Limited.... 186	McLaren, J. C., Belting Co., Limited.... 181	Russell Motor Car Co., Limited 117
Gibbons, J. J., Limited....Outside Front Cover	Meadows, The G. B., Iron & Brass Works Co., Limited 105	Rutherford, The Wm., & Sons, Limited.. 184
Goderich Organ Co., Limited, The..... 185	Metal Shingle & Siding Co., Limited.... 159	Sadler & Haworth 117
Goldie & McCulloch Co., Limited, The... 114	Metallic Roofing Co., Limited 161	Scythes, J. L., Co. 169
Goodhue, J. L., & Co. 181	Montreal Lithographing Co., Limited.... 168	Sheldons, Ltd. 132
Goold, Shapley & Muir Co., Limited 177	Montreal Locomotive Works, Limited.... 130	Smart-Woods, Limited 165
Gourlay, Winter & Leeming 109	Morrow, John, Screw & Nut Co., Ltd.... 131	Steel Co. of Canada, Limited, The 108
Gramm Motor Co., Limited 119	Morton, Phillips & Co. 180	Structural Steel Co., Limited 120
Grasselli Chemical Co., Limited 115	National Acme Manufacturing Co., The. 104	Tallman Brass & Metal Co. 127 and 130
Greening, The B., Wire Co., Limited..... 115	National Paper Co. 163	Thomson, Tilley & Johnston 118
Gutta Percha & Rubber Manufacturing Co., of Toronto, Limited....Inside Back Cover	New Zealand Shipping Co., Limited.... 174	Thompson & Norris Co. of Canada, Limited Outside Back Cover
Hamilton Bridge Works Co., Limited.... 120	Nichols Chemical Co., Limited, The.... 185	Toronto Furniture Co. ?
Hinde & Dauch Paper Co. of Canada, Limited, The 126	Nicholson File Co. 124	Toronto Harbor Commission 157
Howard Smith Paper Mills, Limited.... 127	Northern Aluminum Co., Limited 187	Toronto Hydro-Electric System 155
Imperial Oil Co., Limited 111	Northern Electric Co., Limited 125	Union Drawn Steel Co., Limited 185
Inglis, John Engine Co., Limited 110	Nova Scotia Steel & Coal Co., Limited.. 130	Victor Saw Works, Limited 119
International Time Recording Co. 171	Ontario Government Notices 124	Vogel Co. of Canada, Limited 186
Jeffrey Manufacturing Co. 123	Ontario Wind Engine & Pump Co., Ltd.. 127	Walker, Hiram & Sons 183
Jenckes Machine Co., Limited 172	Otterville Mfg. Co., Limited 185	For Buyers Guide see page 188
Jones, J. L., Engraving Co., Limited.... 187	Page Wire Fence Co., Limited 118	
Jones & Moore Electric Co., Limited.... 167	Paterson Mfg. Co. 134	
Jones Underfeed Stoker Co., Limited.... 159		

FOR BUYERS' GUIDE, SEE PAGE 188.



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who use Street Car advertising get the direct benefit of all the money we have spent, in addition to getting the greatest possible amount of the best advertising for every dollar of their own they spend on Street Car space.

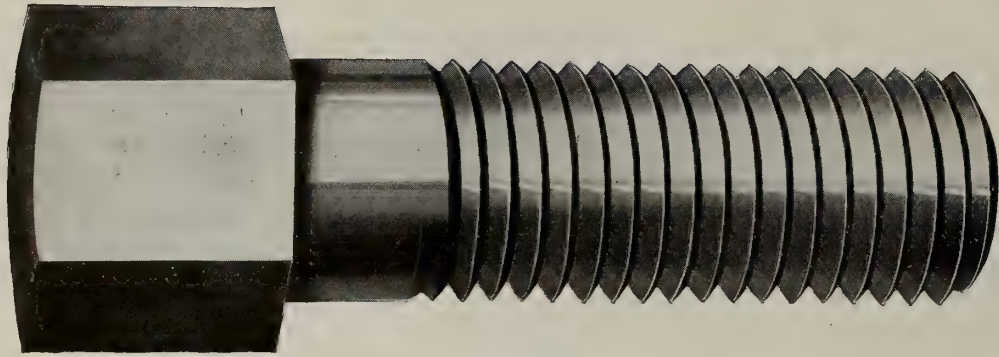
There are 1,735,685 passengers carried daily on the street car lines we control throughout Canada, and with these we have prepared the way for "Made-in-Canada" campaigns.

They are ready to purchase goods made in Canada, but they have to be told what goods are made here.

At a cost of only One Dollar you can reach over 48,000 of these consumers through an advertisement in the Street Cars.

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Studs threaded to order promptly.

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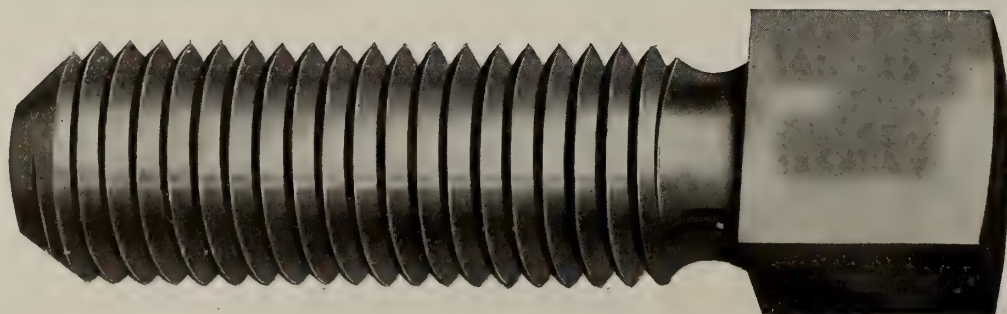
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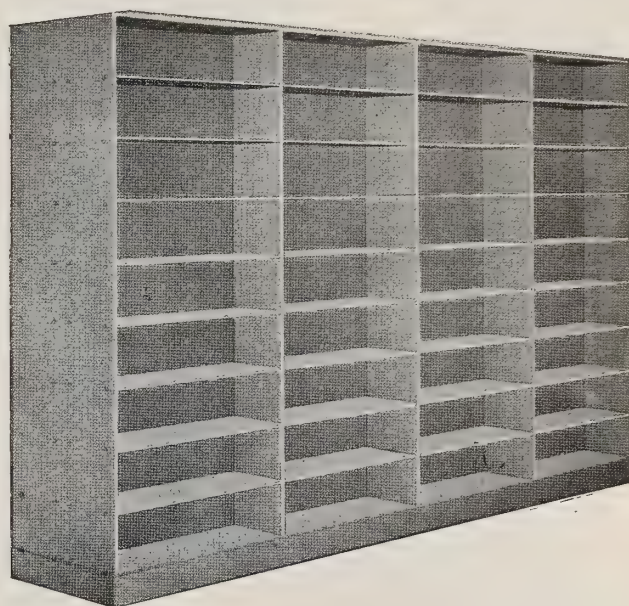
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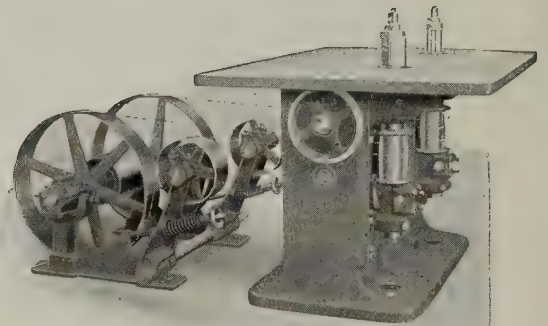
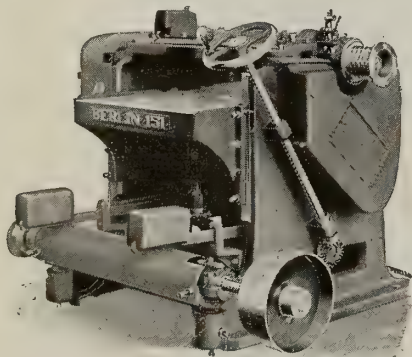
Berlin "Built-in-Canada" Small Tools

While only four types of small tools are shown here, we build and will gladly give you prices on practically any small wood-working tool you may need

Clean Cutting Shapers

It's easy to do the fine edge shaping that your work demands on Berlin Shapers. And there is a Berlin shaper of a size suitable for any shaper work you may want to do.

You may never have investigated Berlin "Built in Canada" shapers for your work. Yet many manufacturers in furniture lines have. They prefer Berlin shapers because they are easily set up and easy to work with. Spindle trouble is reduced to a minimum by the use of crucible steel ground spindles running in self-oiling bearings.



A Dependable Little Surfacer

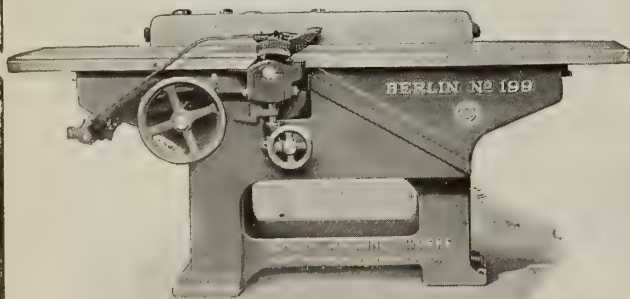
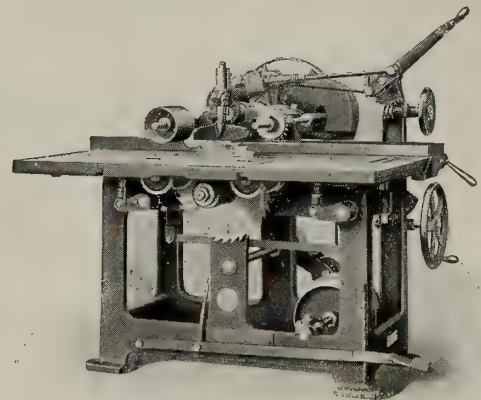
The Berlin "151" Single Surfacer is a close-coupled little tool. It may be used to equal advantage either as a roughing planer, or in giving clean-cut finish on light work at moderate rates of feed. On short stock its output may be doubled by the use of our hopper-feeding attachment.

Because of its easy operation and general adaptability the "151" will work out well in wood-working departments, jobbing shops, or wherever a light single surfacer is required.

A Real Utility Self-Feed Rip Saw

The Berlin "255" Self-feed Circular Rip stands up to its work willingly. Cuts fast and accurate. The rolls are given a slight lead, causing stock feeding to hug the guide, while a hold-down presses stock firmly to the table. This makes true cutting doubly certain. A spur roll prevents stock from being kicked back.

The "255" is a good machine for factory or shop, for ripping long flooring or moulding strips or short pieces.



A Well Designed Hand Planer

The "199" is justly a popular tool with concerns who have use for a hand planer. It is capable of good work and is adapted to a wide variety of work, such as surfacing, jointing, chamfering and rabbetting.

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You see the advantage of this construction. You'll like the other features of the "199," too. The cutter-head may be either round or square.

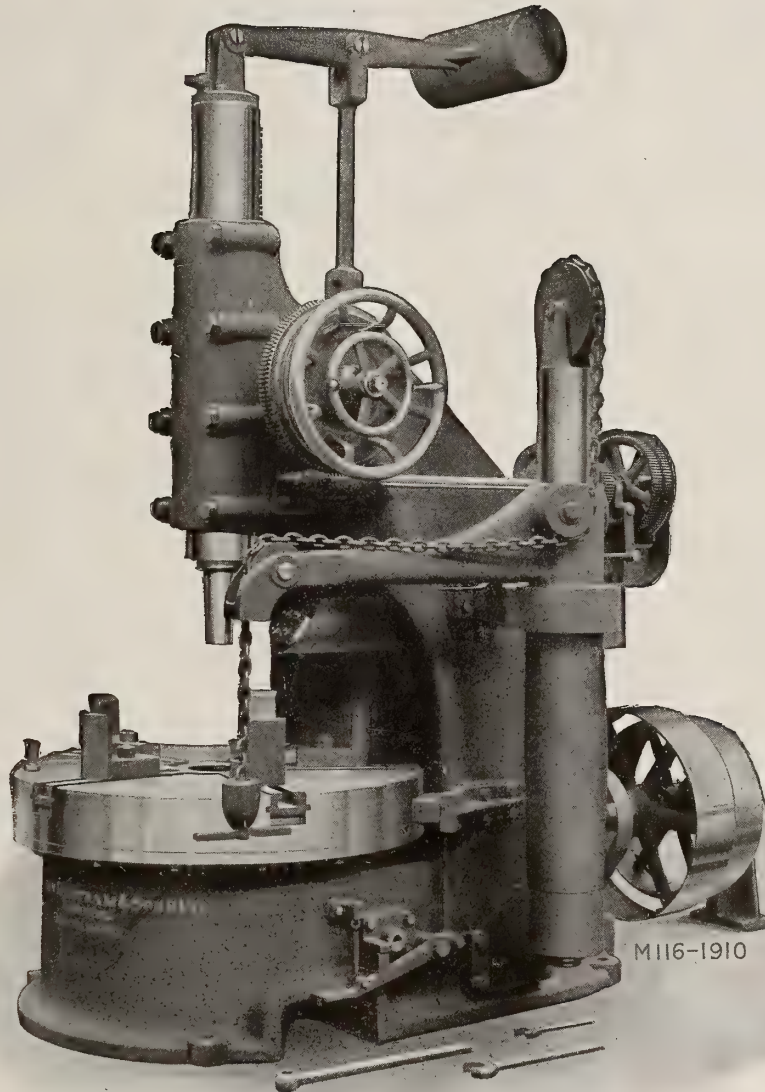
Our Small Tool Catalog illustrates and describes the entire line of small tools we build. Write for your copy now.

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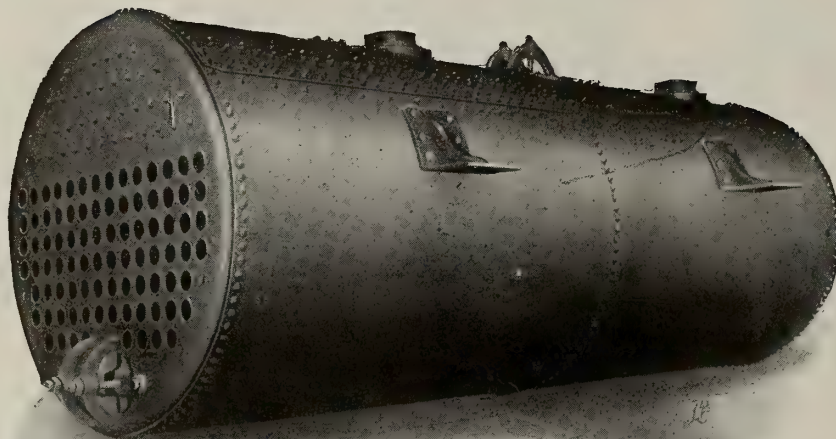
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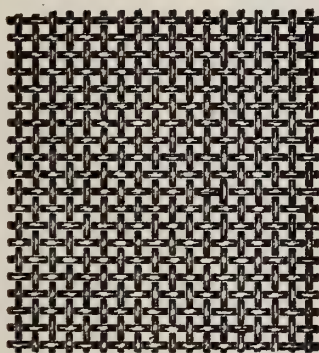
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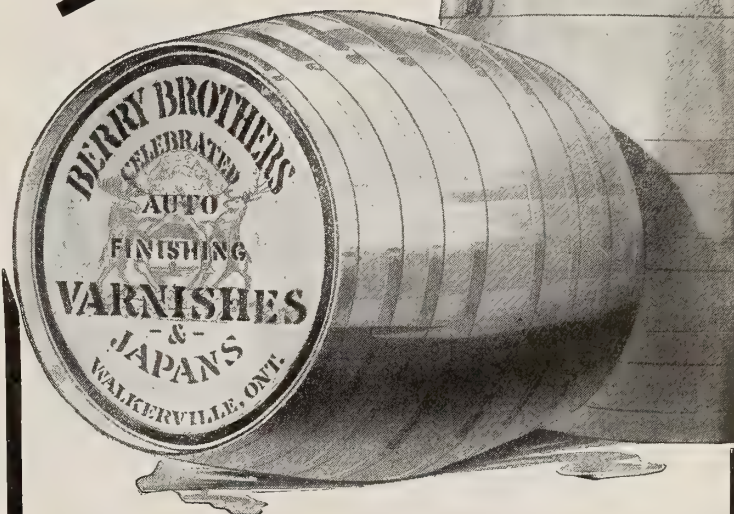
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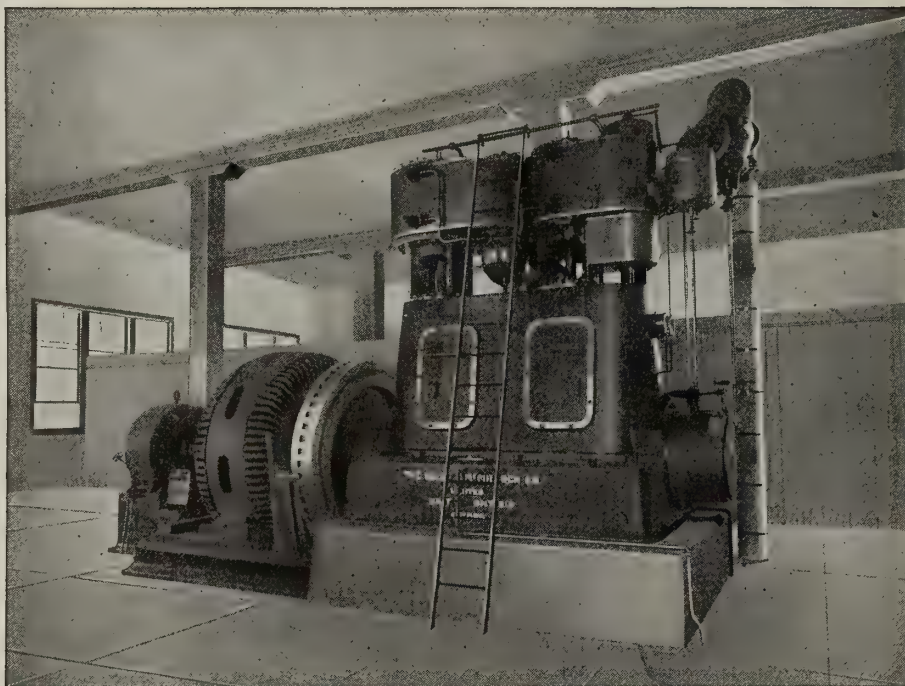
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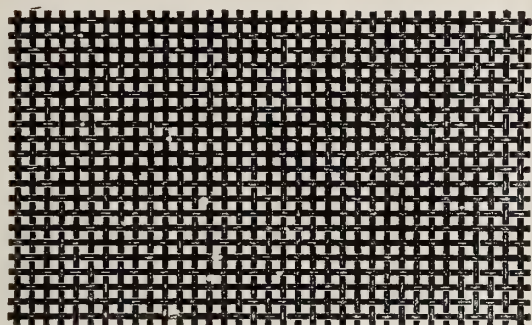
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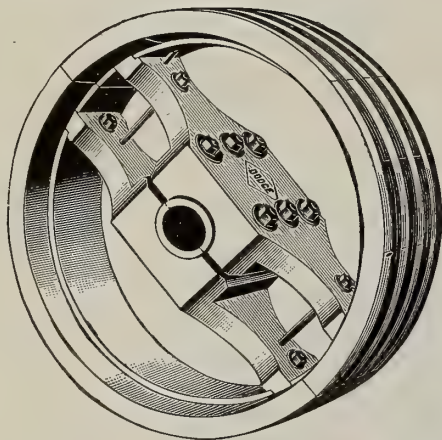
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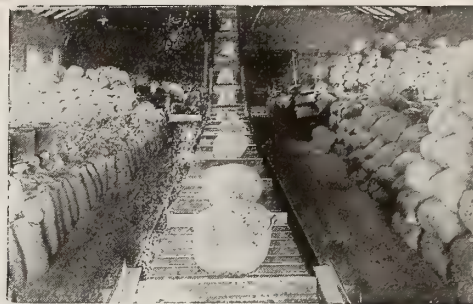
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to

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HON. JAS. S. DUFF

Minister of Agriculture

W. C. McGHIE

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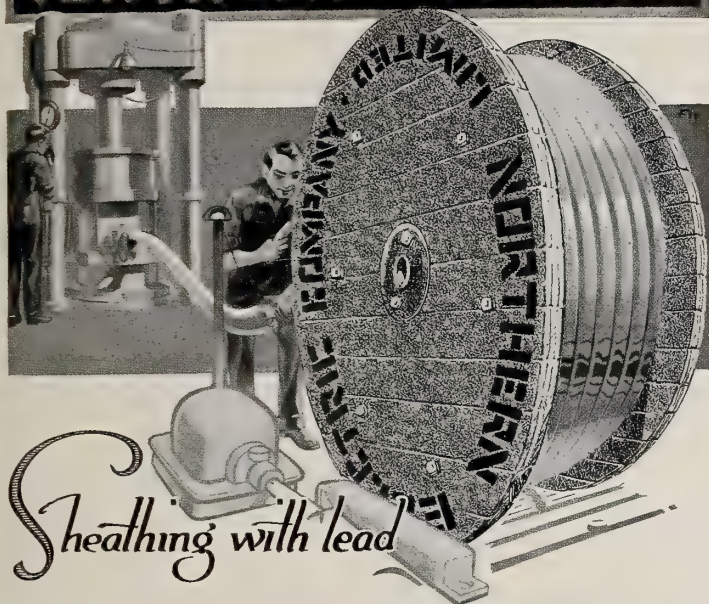
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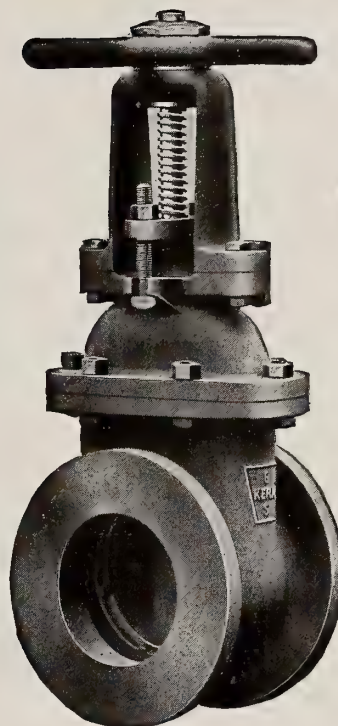


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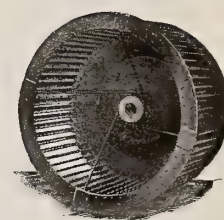
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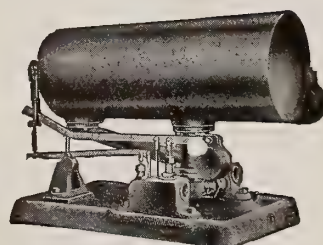
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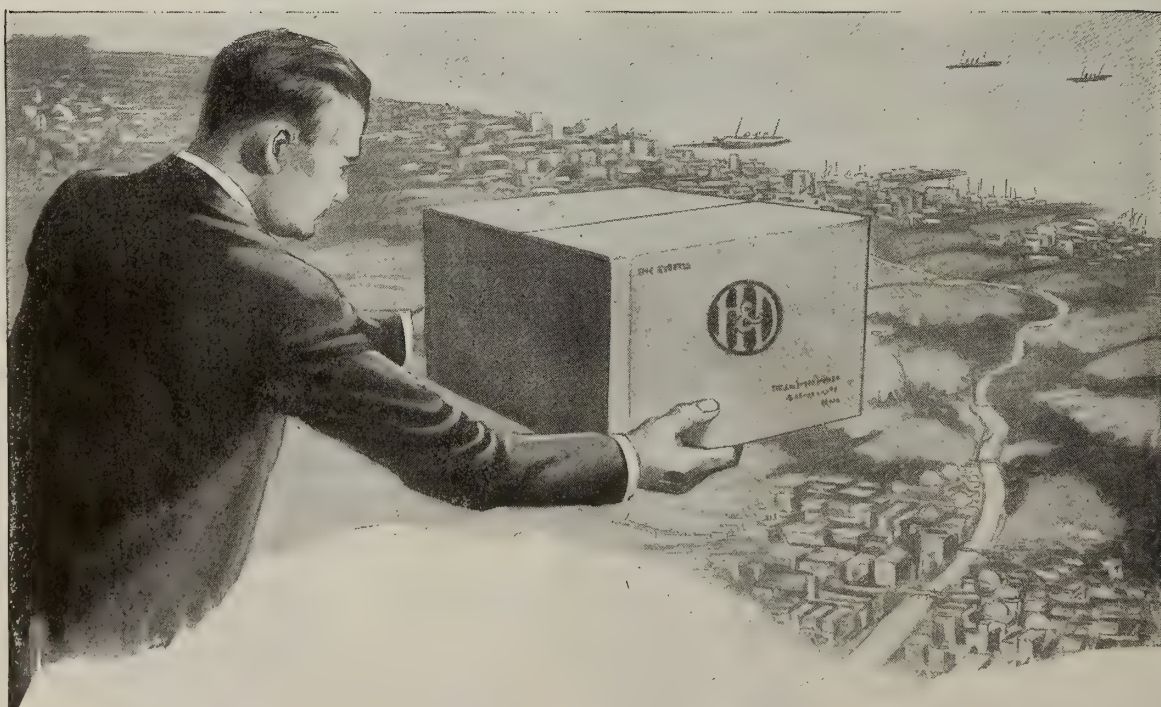
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FINE GOLD,	FINE SILVER	BASE BULLION
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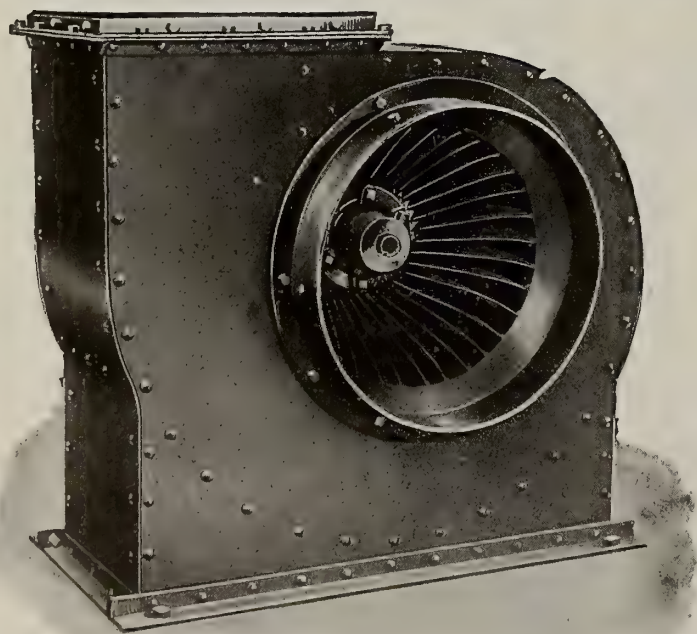
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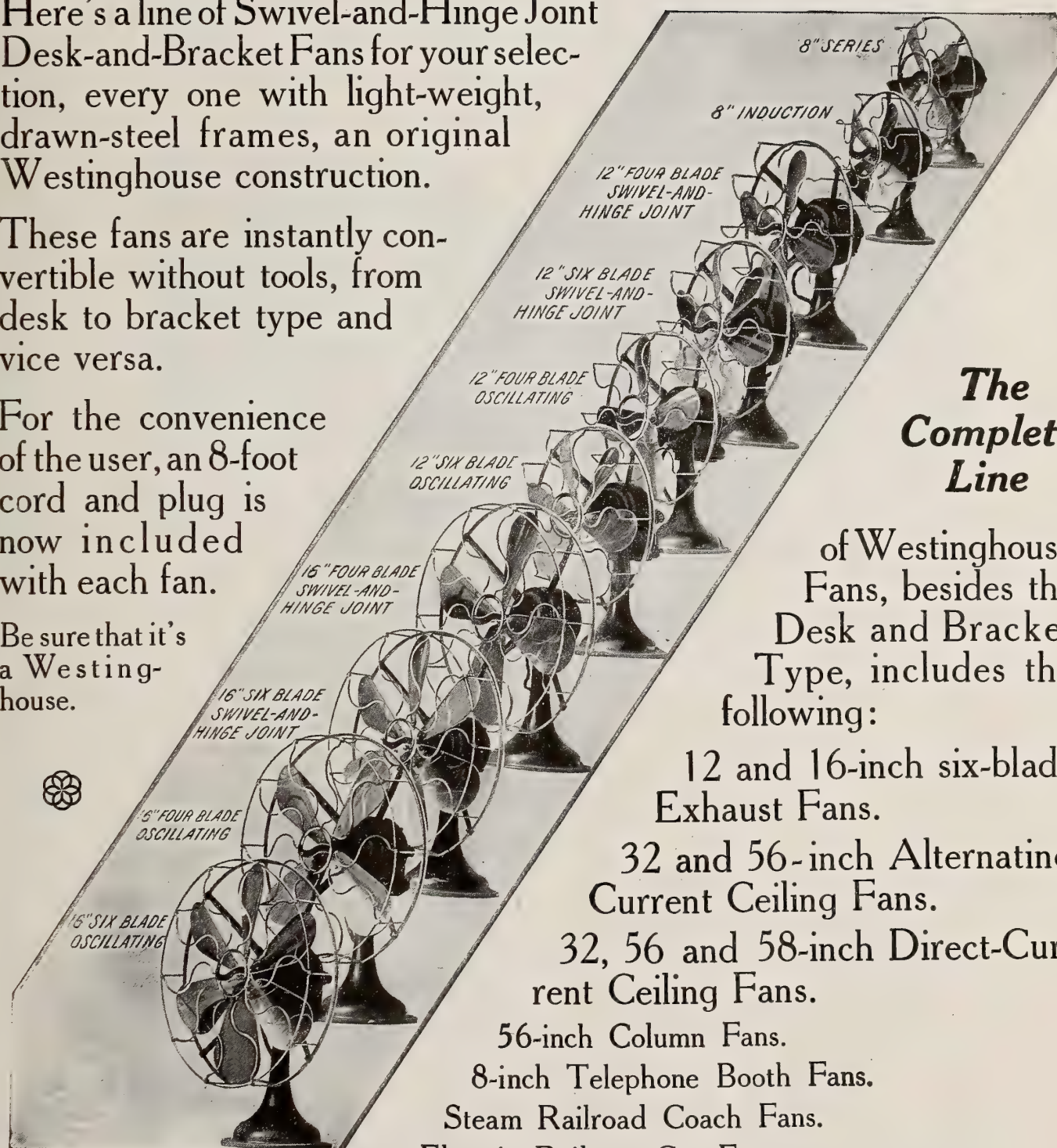
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Be sure that it's a Westinghouse.



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The proper kind of roads in a community means increased property values, more accessible markets, reduced transportation expenses.

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The answer is—"Yes, if Tarvia is used—and here are the facts."

For many years, outside of the heavy traffic zones in large centres, macadam roads were recognized as the most economical and satisfactory. The advent of the automobile changed this. Macadam roads, as then constructed, rapidly disintegrated under motor car traffic.

The French engineers were the first to make this discovery. They, also, were the first to find a remedy, namely, *the use of tar preparations*

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Thousands of miles of macadam roadways have been treated with Tarvia, and to-day a tarviated roadway with its firm, easy traction surface, free from dust and mud, is a blessing to hundreds of communities in various parts of the land.

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INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XVI

TORONTO, JUNE 1915

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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Legislation and Industry.

THAT over 62,000 laws have been placed on the statute books of the United States by Congress and the various State Legislatures during the past five years, and that over 65,000 decisions have been reported by courts of last resort were the astonishing statements recently made by Mr. Elihu Root in an address to the Merchants' Association of New York. Most of these laws affected the business interests, and a great percentage of them were passed by the influence of agitators and politicians, anxious to curry favor with various sections of the people by securing legislation directed against manufacturers. It is quite evident that no manufacturer in the United States, by his own efforts or even with the assistance of legal advisers, can possibly learn all the laws, regulations and decisions applying to his own business. If he made the attempt he would have to give up his business; consequently, he goes on blindly, trusting to luck and compromising as far as possible when he inevitably runs foul of the innumerable laws placed deliberately across his path.

Although matters have not reached this stage in Canada, there are evidences that our tendency to imitate United States business and political methods is laying the

foundation for a similar situation. We, too, have our ever-changing factory acts, systems of workmen's compensation, boards of arbitration, industrial disputes acts and court decisions. It seems to be a deliberate policy on the part of certain factions in this country to prevent manufacturers from developing industry and from giving employment to those who are in need of it. In passing indiscriminate legislation directed against manufacturers the fact is usually forgotten that laws fastening irksome and expensive burdens upon industry add to the cost of manufacturing and that this increase must be paid for by consumers when they buy goods. Low production costs mean low selling prices; high production costs mean high selling prices. Consequently, the interest of the buying public can best be served by vetoing legislation which will increase the cost of production.

The Innocent Firebug.

PUBLIC opinion in Canada is hardening against carelessness in regard to fire. A writer in the *Canadian Credit Men's Journal*, says:

"In some countries a man is liable for loss by fire originating in his own premises and extending to his neighbor's, unless he can show that the fire did not originate through carelessness or faulty construction, and in almost any country that I know of (excepting Canada and the United States), it is considered rather derogatory for people to have an unexplained fire. In Canada, however, a man might have half a dozen fires of unknown origin, and duly collect insurance each time, without detriment to his standing in the community. I am not speaking now of doubtful or fraudulent losses, but those due simply to carelessness, and I maintain that people have no right to jeopardize surrounding property in the manner that obtains here. Public opinion should prevent it, even if the laws do not."

The man whose carelessness causes a fire which burns not only his own buildings but also those of his neighbors has been too long an object of commiseration. He is more dangerous than the incendiary, who, compared with the careless tribe, is a rare bird, and also within the reach of the law.

"MADE-IN-CANADA" POLICY IS ATTACKED BY WRITER IN THE "UNIVERSITY MAGAZINE"

"SHOW me a man who puts up a 'Made-in-Canada' placard and I will show you a man who hopes to increase his own private and personal profit, at your expense or mine, out of the movement."

The above extract is taken from an article signed "S.L." and occupying an editorial or a semi-editorial position, which appeared in the April issue of the *University Magazine*, a review which is published in Montreal and circulated chiefly among university graduates.

Throughout Canada, at the present time, there are thousands of "Made-in-Canada" placards displayed in the most important manufacturing, wholesale and retail establishments. In the advertisements and on the products of our leading manufacturers, whose reputations are national, and in many cases, international, the words "Made-in-Canada" appear. It is quite true, of course, that these "Made-in-Canada" placards and advertisements are intended to promote the sale of Canadian goods and, consequently, to yield legitimate profits to those who make and sell the goods; but "S. L." sees great wickedness in this and seems to infer that Canadian goods should be sold at cost or, better still, at a loss. Are we to assume that "Made-in-Germany" or "Made-in-Austria" goods were formerly sold in Canada without any regard for "private and personal profit" to those who made them, or that goods made in other countries are now being sold in Canada for similar disinterested motives?

Admitting that manufacturers and dealers who advocate the "Made-in-Canada" policy hope to derive personal benefit from it, which no reasonable person thinks of denying, surely they can also be given credit for a broader interest in the success of the movement and for entertaining the belief that the adoption of the policy will be of great advantage to other classes as well as to themselves.

We quote further from the article:—"The streets of Montreal are placarded with a picture—a most moving picture—of a sorrow-stricken workman and his martyred wife—brought to ruin by the folly of their fellow-citizens who will not buy the things they make. Up to the present time no one has yet drawn a set of pictures to represent the economic consequences that would follow if the 'Made-in-Canada' movement obliterated foreign trade; the ruined homes of the transport worker whose job has ended when the ocean steamers abandoned the port of Montreal; the wholesale importer driven out of business by the prohibition of trade in English goods, his afflicted clerks clinging about his knees and asking vainly for a crust of bread; the Canadian farmers—or no, let us say, the whole population from Winnipeg to the Rockies sitting in rags and misery with a huge heap of unsold wheat beside them which they cannot eat and which they must not sell. For it never occurs to the 'Made-in-Canada' propagandist that if a country does not buy then it cannot sell. Our exports are sold in the first instance for money, but sooner or

later, and in the long run, goods are exchanged for goods. The truth is that the workers who are busy with the transport trade and the import trade and those who are working on the farms, together with all those who are teaching school, preaching the gospel and training for the war, are far too busy to run around placarding the walls of the cities with mimic pictures of imaginary distress."

In the above paragraph it is evident that the writer has indulged a taste for burlesque at the expense of facts. The poster in question, which most of our readers have probably seen, depicts a factory workman and his family in trouble through lack of employment, and is intended to convey the suggestion that the family's misfortunes are caused by the purchasing of foreign goods instead of Canadian goods. Those who have any knowledge of the actual conditions which existed throughout Canada during the past winter know that there were thousands of cases of industrial distress much more acute than that suggested in the poster. There was the most intense suffering in Montreal, Winnipeg, Toronto and other cities as a result of industrial depression. Yet, the author of the article in the *University Magazine* shows his appreciation of industrial conditions in the country by ridiculing scenes like these as "mimic pictures of imaginary distress." Probably secure in the receipt of his own income, he is apparently oblivious to any sort of economic worry just as a man who sits besides a warm fire within a house is unconscious of zero weather outside. His inability to appreciate the facts of the situation last winter, or, for that matter, at the present time, is equalled only by his misrepresentation of the principles underlying the "Made-in-Canada" campaign.

The "Made-in-Canada" argument is simply this. Canada is a young country, which, although it has one of the most moderate protective tariffs in the world, has built up a great national industrial system. For a couple of years the output of this plant has decreased because the demand for manufactured goods has fallen off, with the result that many workers are out of employment and a great quantity of unsold goods is stored in warehouses. Yet we are buying hundreds of millions of dollars worth of manufactured goods abroad. Those who advocate the "Made-in-Canada" policy say to Canadian buyers: "Before you purchase an imported article see if you can find a similar Canadian article which would suit you. You will probably find it and you will find probably, too, that the quality and price compare favorably with the quality and price of the imported article. If you should discover in some cases that the Canadian article is not quite so good or quite so cheap as the imported article, ask yourself if your patronage will help in time to bring about a state of affairs where the Canadian article would be equal or superior to the imported article. Possibly, in view of the present extraordinary situation, you might concede a little in

favor of the Canadian article, but we do not ask you to make any considerable sacrifice to do so. If thousands of Canadian buyers follow this policy, Canadian goods can be produced in such great quantities that their quality can be improved and their price lowered. Canadian raw material will be utilized, employment will be furnished at home, and our foreign obligations will be reduced."

"If a country does not buy then it cannot sell," says "S. L." "Sooner or later goods are exchanged for goods."

The above statement, while it contains a certain degree of truth, is capable of a most erroneous application. H. G. Wells, the well-known English writer, falls into the same misleading generality when he ridicules what he calls the modern craze among nations to arrive at a state where they can export everything and import nothing. When they condemn such a national ambition, which is absurd and impossible in a civilized country, they are right, but when the claim that the "Made-in-Canada" policy fosters any such ambition they are wrong.

There are two economic conditions which are impossible, and if they were possible, they would be undesirable. First, there is the ideal of a world of nations, each surrounded by a Chinese wall, refusing to trade outside their own boundaries. Second, there is the contrary ideal of perfect freedom combined with high specialization, which would result in nearly all the world's manufacturing being carried on in a few densely populated centres, leaving the rest of humanity to the task of gathering raw material and buying it back in the shape of finished products.

Canada does not favor the realization of either ideal. We do not want to be surrounded by a Chinese wall, nor do we want to have most of our manufacturing done for us by specialists living thousands of miles away. We want to manufacture most of what we consume, especially those articles which Canada is best adapted to produce. President Wilson, discussing the limitations of Protection, in his book, "The New Freedom," points out, for example, the absurdity of a northern country demanding the imposition of a high duty against bananas in order to stimulate their production at home. Under these circumstances, a campaign to promote the sale of "Made-in-Canada" bananas would not be convincing, but since our country is capable of producing the great majority of the articles Canadians use, why should the "Made-in-Canada" campaign be attacked when it seeks to bring to the attention of the public certain excellent qualities of these products with a view towards stimulating the patronage of home industry?

But let us divorce the dictum of "S. L." from the region of theory and apply it to Canadian conditions and we find that it disproves his own argument. The trouble with Canada for some years is that she has been buying too much and selling too little. Instead of exchanging goods for goods we have been exchanging debts for goods. We have been getting other people's goods and giving promises to pay. What we must do is to give our goods to redeem our promises. Our exports must become more

nearly equal in volume to our imports. In fact, this is happening now, as the following statistics show:

Fiscal Year.	Imports for Consumption.	Domestic Exports.
1912-1913.....	\$675,000,000	\$360,000,000
1913-1914.....	618,000,000	431,000,000
1914-1915.....	455,000,000	409,000,000

It has never been the object of the "Made-in-Canada" movement to "obliterate" foreign trade, as Canadian manufacturers would be the last to advocate such a policy because they will always import a considerable amount of raw material.

"S. L." claims that the workers in ocean transport and import trade are very busy, but he has failed to realize that they are busy carrying imported goods into Canada while thousands of our own factory workers are not busy at all. It is improbable that those engaged in the import trade would be adversely affected by the success of the "Made-in-Canada" policy because we must still continue to import millions of dollars worth of goods, and moreover, some of those who are now engaged in the import trade could handle Canadian goods in the event of an increased demand. Where industry, including its greatest branch, agriculture, flourishes, there is work enough for all. Neither is it intended to ruin the transport worker by banishing steamships from the port of Montreal, nor the Canadian farmer by preventing him from selling wheat. What is there in the "Made-in-Canada" doctrine which would "leave the whole population from Winnipeg to the Rockies sitting in rags and misery with a huge heap of unsold wheat beside them which they cannot eat and which they must not sell." (Is this not "a picture of imaginary distress"?) We want the Western farmers to sell their wheat. We hope that they will grow two hundred and fifty million bushels of wheat this summer and ship it to Europe. Many hundred million bushels of wheat will be needed in Europe to pay our debts, and if steamships carry this wheat to Europe and still continue to bring back goods which are not made in Canada, how will ocean transport suffer? As for Canadian railways and inland steamship lines, they derive as much profit from carrying Canadian goods as they get from carrying imported goods.

At the conclusion of this article, "S. L." says that Canada must retain the policy of Protection, a statement that we appreciate but find it difficult to reconcile with his hostility to the "Made-in-Canada" campaign, because the National Policy, which was formulated and passed originally by a "Made-in-Canada" campaign, has been maintained by successive and persistent similar campaigns. In other words, the National Policy and "Made-in-Canada" are identical and he who attacks one attacks both.

Without wishing to question freedom of discussion, it might be considered surprising that the *University Magazine* (which is partly supported by grants from several Canadian Universities) should give space to an article attacking the "Made-in-Canada" idea at such a critical period in our history. If the argument were carried to

its logical conclusion the abolition of our universities which, after all, are Canadian products, might be advocated and it might be argued that we could import all the graduates we need. Before the National Policy was adopted, our universities were small and struggling, their professors were poorly paid, their students few, because the great majority of young men left Canada to seek opportunities elsewhere; and their resources were small because there was little wealth in the country which could be spared for endowments. A great change, however, has come over our universities in the past few years. Splendid buildings have been erected through the generosity of governments and private individuals, students have flocked into their halls and the number of professors has been greatly increased. What has brought this change about? Simply the development of the "Made-in-Canada" idea. Manufacturing has opened opportunities for thousands of graduates of scientific courses. Railways, which were built to interchange Canadian products, have given work to young engineers. Doctors, lawyers and ministers have located by the hundred in manufacturing towns and have made their living out of industrial populations. Yet, we have the *University Magazine* publishing an article ridiculing the "Made-in-Canada" idea, and lending the cloak of its prestige to an attack upon the policy which has literally made Canada and her universities.

Bonusing Industries.

THAT Canadian municipalities are getting tired of a system of bonusing industries is the statement made by the *Canadian Municipal Journal*, the official organ of the Union of Canadian Municipalities.

"With one or two exceptions the only result has been an increased burden on taxpayers," it says, "and one dares venture to state that if a consensus of opinion could be got from all the municipalities of Canada, which have been in the habit of giving bonuses as an inducement to build up an industrial life, it would be found that they have been heavy losers. Bonusing means the paying of good money, which could be better spent in local improvements, as an inducement to responsible manufacturers to locate in a given place."

With the above statements INDUSTRIAL CANADA on the whole agrees. There are undoubtedly some instances where a city or town has been repaid for the bonus given to a deserving manufacturing company. Individual cases give rise to special considerations and must be dealt with as the circumstances warrant; but, as a general rule, a manufacturer in looking for a site considers the proposed location only in regard to its suitability for industrial purposes, realizing that a bonus may be lost many times over if it ties him to a poor site amid unfavorable conditions. Moreover, the practice of bidding against one another for industries, which is indulged in by some municipalities, leaves them open to exploitation by unscrupulous promoters. Unless special considerations apply, modern conditions demand that a manufacturing site must stand on its own merits without the support of a bonus.

Interested Advice.

COL. J. B. MACLEAN, of the MacLean Publishing Company, Toronto, publishes a number of trade journals which are more or less familiar to the manufacturers of Canada. Col. MacLean's advertising solicitors are perhaps better known, because the lives of Col. MacLean's publications depend upon the success or failure of these advertising agents in extracting advertisements from manufacturers. Canadians, who have been patronizing the MacLean publications with their advertising, will read with surprise an attack upon the "Made-in-Canada" campaign published in the *Financial Post*, a MacLean journal, and reprinted in the *Canadian Grocer* and *Canadian Machinery*, which are also owned by the MacLean Publishing Company. The article begins by a skirmishing admission of a general character, to the effect that most Canadian goods will stand comparison with goods made in other countries. Having constructed this reserve trench into which it can fall if necessary, the *Post* then proceeds with its real attack by saying: "There are some Canadian manufacturers who unfortunately think their own interests are best served by making the cheapest and most inferior article they can force upon the buying public."

If the *Financial Post* knows of any Canadian manufacturer who is making the "cheapest and most inferior article he can force upon the buying public" why does it not publish the name of that manufacturer (taking the necessary precaution, of course, to see that he is not an advertiser) instead of levelling from the safe ambush of general terms a most injurious and misleading charge against Canadian industry.

The object of the article, however, appears very clearly in the following part of its argument: "A general campaign of advertising 'Made-in-Canada' goods would be paid for largely by the firms who are making high-grade goods, while the benefit of such an advertising campaign would be derived chiefly by the men who are trading on 'Made-in-Canada' reputation and producing inferior goods to sell at slightly lower prices. The Committee of the Canadian Manufacturers Association would be far better occupied and could do more real good for Canadian manufacturers if they were to devote their energies to improving the quality—by moral and other influences—of the goods produced by the scoundrels who would injure the good name of reputable Canadian manufacturers. Canadian manufacturers producing an article of which they are proud, behind which they will stand, should let the public know of it. They should advertise it extensively over their own names and not pay and be sponsors for firms who have no care for their own or our national reputation."

We think that the *Post's* objects are: First, to make manufacturers dissatisfied with the "Made-in-Canada" campaign, which appeals to the public largely through the newspapers; second, to induce the manufacturers to "advertise extensively" their individual products, preferably in the trade journals owned by Col. J. B. MacLean.

New Zealand Wants Canadian Goods.

IMPORTERS are anxious to buy within the Empire as far as possible," writes Mr. Th. de Schryver, representative of the Canadian Manufacturers Association, Auckland, New Zealand, to INDUSTRIAL CANADA. "It is a great pity that Canada is unable to compete against the United States in many lines. I expect, however, that this will gradually improve. Business in New Zealand is somewhat quiet owing to the war, but as soon as a decisive victory has been achieved by the Allies I expect an unprecedented boom. Owing to the increased demand for our principal products, wool, meat, butter, hides, flax, etc., money is pouring into the country but finds at present its place in banks, safe deposits and savings banks. All these institutions show largely increased deposits. This money has to be made productive and depositors are only waiting for a more satisfactory outlook on the battlefield to invest in more speculative business."

It is interesting to notice that a similar situation in regard to the increase of savings bank deposits exists in Canada. Apparently, New Zealanders, as well as Canadians, are becoming addicted to the questionable practice of hoarding money at a time when reasonable spending on the part of those whose incomes have not been seriously affected by the war, would help to relieve industrial depression by stimulating a better demand for manufactured goods. The sentiment in favor of purchasing within the Empire is one which is growing in the various Dominions and may result in an Imperial system of preferential tariffs at the close of the war.

Lessons from Edison's Fire.

WHAT Thomas A. Edison learned from the recent great fire which almost completely destroyed his plant should be interesting to Canadian manufacturers. In an interview with *Factory*, Mr. Edison says that he is satisfied that concrete stood the greatest practical test ever given to it; that concrete buildings can be repaired quickly—and that he will be able to salvage fully 97 per cent. of his machinery as a result of the resistance offered to the fire by the concrete walls, pillars and floors.

To protect his new plant from a repetition of the fire he will use steel sash and wire glass in all the buildings. Combustible and non-combustible materials and products will be kept separate while going through the factory. Combustible materials will be handled and stored in wooden buildings sheathed with iron. Highly inflammable materials will be stored in cheap structures. All openings, both vertical and horizontal, will be safeguarded and the floors will be surfaced with cement. Factory furniture in the refitted building will be of steel and wooden work-boxes and other fixtures of wood will be sheathed with tin.

Mr. Edison was criticized rather sharply by Mr. Franklin H. Wentworth in the *National Fire Protection Association Quarterly*, on the ground that a great inventor should have taken more care to invent means to save his own

buildings. Mr. Wentworth seemed to think that the preventive equipment in the Edison plant was rather below the average. However, Mr. Edison seems to have profited by his costly experiment and has determined to equip his new factory with every scientific device for fire protection.

How Can We Populate Our Farm Lands?

THERE are two clearly defined and contrary forecasts of the after effect of the war on Canada. The pessimists declare that our immigration will suffer because all able-bodied men will be needed in Europe; that capital will not be loaned to us because it will be required to rebuild the shattered cities and public works; and that all the conflicting nations will be compelled to patronize their own farms and factories to save them from ruin.

The optimists contend that our immigration will be swelled by thousands who will be tired of perpetual conflicts; that capital, regardless of sentiment, seeks the most profitable fields; and that if we cannot get it in Europe we can get it in the United States; and that the assistance of Canadian factories and farms must be called upon to help rehabilitate Europe.

Men of high standing and sound judgment are ranged on both sides of this controversy, but there are indications that the optimists are prevailing. At any rate, economic history is fairly consistent on one point—the trade of a victorious nation thrives after war.

There is agreement as to the necessity of increasing the production of our land. We have plenty of land, but land without tillers will not produce wealth. Volume Number 4 of the Census, dealing with agriculture, which has just been issued in bound form, states that the total land area of the Dominion is 2,306,502,153 acres, of which, at the date of the Census, the nine provinces occupied 977,585,513 acres. Eleven per cent. of the land in the provinces, or 109,948,988 acres, was occupied by farmers, while the land considered suitable for farming was 36 per cent. of the total.

How to secure from these vast areas the production of which they are capable is our chief national problem. If we could solve it we would be assured of corresponding industrial development, and the necessary capital to finance both agriculture and industry. Canada needs an immigration policy which can succeed in settling experienced farmers from Europe and the United States on our vacant, fertile lands.

Alcohol to Replace Gasoline.

THE tremendous drain on the world's supply of gasoline caused by the war has directed attention to the possibility of providing a substitute. Apart from the war, the demand for gasoline has been growing so steadily, with the perfection of the various machines invented which require it as fuel, that the satisfactory continuation of supply is seriously threatened.

The possibility of using alcohol as fuel has interested scientists and engineers for some time, especially as alcohol is being produced in increasingly large quantities throughout the world. It is now made in Germany from potatoes, in France from beets, in the Orient from rice, and elsewhere from certain grains which contain starch.

A committee of the Imperial Motor Transport Council, London, which will be known as the Alcohol Motor Fuel Committee, has been appointed to provide, if possible, proof that alcohol can be used to commercial advantage in internal combustion engines as a substitute for petrol, benzol or other mineral motor spirits. It is estimated that the committee's investigation will cover a period of from three to five years and will require the expenditure of about \$150,000.

As it has been shown that low-speed internal combustion engines can be driven with alcohol, the committee will not have to waste time proving this fact. Their efforts will be directed to the manufacture of special engines and to the possibility of securing abundant supplies of the alcohol necessary to run them at a lower price than that now paid for gasoline.

If the committee succeed, their finding will produce a far-reaching effect in many industries.

Non-Metallic Minerals Used in Canadian Manufacturing Industries.

THE rapid industrial growth which Canada has been undergoing in recent years has greatly increased the demand for the non-metallic minerals, and is constantly affording new uses to which they may be applied. In many of the manufacturing industries, minerals, in a more or less crude state, are used as raw material or, indirectly, as a means of producing the products of the factory."

The above is taken from the report on non-metallic minerals used in Canadian industries which has just been published by Howells Fréchette, M.Sc., Chief of the Non-Metalliferous Deposits Division of the Department of Mines, Ottawa. In pointing out that an unduly large proportion of the mineral used in these industries is imported, he says:

"In some cases the importation is necessary or advisable, since some minerals and particular grades of others are not obtainable in Canada, or the material may be obtained from abroad for less than the cost of production and delivery of the Canadian. In other cases, however, it is due to the fact that the domestic products are not always prepared in the form most suitable for the purposes for which they are required. Frequently the buying and selling methods in use are at fault. For example, the Canadian producer, through lack of capital, is often at a great disadvantage, being unable to advertise extensively and thus attract attention to his product and secure a trial of it, even though his price be lower and his products as good, or better than the imported article. The

greatest bulk of imported materials comes to this country from the United States. The American producers and jobbers have standardized their products and established grades with trade names, which they have brought to the attention of the consumers in this country by persistent and systematic advertising and efficient selling methods. Their goods have been tried and become known to the manufacturers, who, when satisfied with the results, have been loath to experiment further. A great many manufacturers know little concerning some of the raw materials which they use, the selection of which is frequently left to the judgment of the supply firm with which they deal, or else based on an original trial shipment. It is very seldom that specifications are used in purchasing. The orders are made to read "same as last shipment," or "suitable for such and such a purpose."

Mr. Fréchette was commissioned by the Dominion Government to compile information in regard to the demand for non-metallic minerals, the uses to which they were applied, and the requirements of consumers with regard to purity and physical properties. He travelled throughout Canada and visited a great number of manufacturers who use non-metallic minerals, and his report is based on the information he received from these manufacturers and upon his own observations. The report is very thorough and deals in a lucid manner with the various non-metallic minerals. For example, the first mineral dealt with is asbestos. This is described, the articles manufactured from it are enumerated, the processes of manufacturing articles into the composition of which asbestos enters are analyzed, the total consumption of asbestos by provinces is given, and the process of mining asbestos is described. Similar information is given with regard to barite, clays, feldspar, corundum, graphite, gypsum, talc and a great number of other non-metallic minerals. In an appendix there is given a list of Canadian manufacturers who use these minerals, which should be very valuable to those who have them to sell.

Bridging the Gap.

CANADA is rapidly bridging the gap between her exports and imports. For the fiscal year 1913, our imports for consumption exceeded our domestic exports by \$315,000,000; for 1914 by \$187,000,000; and for 1915 by only \$46,000,000.

This condition of affairs does not necessarily mean prosperity, because it has been brought about largely by a great decrease in our imports, which means a curtailment in our purchasing power. The fact remains that our total trade, that is, the sum of our exports and imports, will be much less in 1915 than in 1914, or in 1913. But the readjustment of trade, bringing something equivalent to a balance between what we sell and what we buy, well produces the stability which our commercial life needs after the recent period of extraordinary development.



Should this magnificent stand of timber at Cameron Lake, British Columbia, fall before forest fires?

MAKING THE FORESTS FIREPROOF

By ROBSON BLACK

Secretary of the Canadian Forestry Association

ALTHOUGH many phases of forest conservation demand attention, it is quite clear that until *forest fires* are properly combated by the action of governments, lumber and railway companies, and individuals, progress of whatever sort must gauge its path by inches.

Recently it was pointed out by a forestry expert that the cut of lumber in Canada since Confederation had been worth over a billion and a half dollars, while the lumber sacrificed to fire by the shortcomings of governments, railways, lumber companies, not to speak of settlers, was eight times the quantity cut, and worth, of course, an amazing amount of money.

Steadily, if slowly, the enormity of these fire losses has worked upon the Provincial and Federal Governments of Canada, as well as private interests, until the right of fire to devastate the priceless timber areas is being disputed with increasing vigor. As has long been established forests can be rendered practically fireproof. By means of experienced fire-rangers, telephone lines and personal equipment, canoes and horses, gasoline "speeders" for the railway lines, and other impedimenta costing no more than a moderate insurance premium, but rendering gigantic service—fires can be held under control and rich areas of timber saved for future use. This has been done with very fair thoroughness on some of the public and private limits of the Dominion, although the

excessive drought of 1914 almost defied the resources and devotion of rangers and inspectors from coast to coast. The losses last season were tragically heavy.

As to the responsibility for forest fires, each section of the country shows a set of causes more or less varied but never contradictory. In Manitoba, Saskatchewan and Alberta, outside the forest reserves, 480 fires occurred in 1912, and the Inspector thus enumerates the reasons: Campers, surveyors, prospectors, etc., 138; careless clearing of land, 108; locomotives, 86; deliberately lighted, 5; unknown causes, 131; etc. The Inspectors of the St. Maurice (Que.) Forest Protective Association divided 306 fires in this manner: Settlers, 151; fishermen and sportsmen, 8; drivers, 17; railroads, 17; unknown causes, 102, etc. British Columbia in 1914 was visited by no less than 1,832 forest fires of which 487 were due to campers and travellers; 367 unknown causes; 361 operation of railways; 169 to lightning; 164 to brush burning in clearing of farm land; 98 to railroad construction, and the remainder to industrial operations (as logging) plus incendiarism, road construction and miscellaneous causes.

In the case of the seven Dominion Forest Reserves, 33 fires were reported in 1912—an unusually favorable season—22 inside the reserves and 11 adjacent to the boundaries. Twenty-two of the total number were due to locomotives, 4 to camp fires, 1 to lightning and the balance to railway construction,

land clearing, dropping matches and "unknown." All the provinces adopt a similar category to which to ascribe the forest losses, although sometimes in varying ration. The point worth emphasizing is that only one cause—*lightning*—has any legitimate excuse for toleration. Every other means of setting ablaze the precious, often irreplaceable, forests of the country can be and ought to be, abandoned as the only sensible and economical policy.

That this view of the national resources is coming into general acceptance, there is encouraging evidence. "Burned forests pay no freight rates," says a United States railroad company to all its trainmen and sectionmen by way of inspiring them to regard fires along the right-of-way as a direct blow at the company's earnings. Canadian railways as a whole have shown a most commendable desire to adopt this phase of conservation as identified in good results with the



This is what a forest looks like when fire pays it a call. The ground in this picture was so littered with lumbermen's "slash" that fire was almost inevitable

encouragement of settlers, the tapping of new freight sources and other concerns of railway statesmanship. "Burned forests pay no freight rates" is a truth so plain and potent as to dispel any suspicion that "scientific forest management" is just an aesthetic notion to be kept under glass and touched with dainty fingers. It is as *business like* as a time clock.

All the railway companies of Canada now have a fire inspection department managed by trained foresters. Rulings of the Board of Railway Commissioners have made them responsible for fires occurring within 300 feet on each side of the right of way. This enactment has resulted in a new form of co-operation. Train crews and sectionmen are in-

structed to take the time and trouble necessary to meet the letter of the law, and while there have been aggravated departures from this, Canadian roads as a whole are shaping their conduct adequately to meet the responsibility. Surely, of all factors in Canadian commerce, the railways should take the deepest interest in what happens to the country's timber. About five billion feet of timber have gone into Canadian railway ties, bridges, fences, stations, buildings and equipment. The Canadian Pacific on its Western lines alone has used thirty million ties. The three main systems require at least ten per cent. of the annual cut of five billion feet for maintenance. Furthermore, the transportation of lumber and other forest products forms one of the heaviest revenues of all the companies. Were one to enter into other manifest reasons for the keen interest of the railways in conservation of the forests, the table would run to impossible lengths. One may quote, however, a few sentences of Mr. J. S. Dennis, Assistant to the President of the Canadian Pacific: "In these projects (the C.P.R.'s irrigation works in Alberta) about \$12,000,000 have already been invested and by the time the projects are completed the investments will run into \$20,000,000. The value of the investments will be completely destroyed if the timber on the eastern slopes of the Rocky Mountains is cut off so that the water from that watershed, instead of coming out as it does from timber areas in a regular flow, comes in the shape of floods, leaving the streams dry at the times when water is most needed. We want to see the forest reserves upon the eastern slopes of the Rocky Mountains protected and extended."

As a practical testimony of this faith in conservation the Canadian Pacific maintains a staff of foresters and enforces a policy on its own timber limits by which lumber and ties will be taken out as an annual "harvest" without impairing the recuperative powers of the forests. So, too, in the use of oil-burning locomotives throughout the British Columbia timber areas the Canadian Pacific took a vigorous lead, practically discarding coal-burning equipment altogether. The Grand Trunk and Canadian Northern railways have also adopted a definite forest policy and are coming more and more to co-operate with governmental and other agencies in the reduction of forest losses through fire.

Those provincial governments possessing control of their timber lands have, under pressure of public sentiment, devoted more and more attention to *forest management*, as that is understood by the scientific forester.

Ontario, which spends about \$250,000 of public money yearly on fire ranging, is under the necessity of conserving a source of annual revenue approximating two million dollars. The policy of forest protection, to which Mr. Aubrey White, C.M.G., has devoted his life, took root in 1885 by the inauguration of a fire ranging system. Thirty-seven rangers were employed in that year at a cost of \$7,911. In 1914 close to one thousand men were engaged in protective work at a cost of \$325,000, to which the province contributed all but \$92,000, the portion of the limit holders. This year, the staff of the government has been reduced to some extent as a result of the order of the Dominion Railway Board requiring the Canadian Northern Railway to maintain its own fire rangers, the government share being confined to the appointment of inspectors. Preference is given in the selection of fire rangers to Northern Ontario settlers, especially to married men, where they are willing to surrender the attractions of homesteading, prospecting or acting as guides to tourists to follow the business of fire fighting. Ontario has never hesitated to spend money freely on forest protection, nor to adopt policies which the Department of Lands, Forests and Mines regarded as in the interests of proper conservation. All licensees must patrol their own areas; otherwise the Department performs the service and charges the cost against the lumberman. Tracts re-



A standing invitation for a spark. Railway right-of-way, overgrown with brush



Railway right-of-way in good condition to minimize fire dangers. Inflammable material removed

quiring reforestation have been bought from license holders and added to existing forest reserves, thereby reducing very considerably the fire risk in these districts. As Hon. W. H. Hearst pointed out in a recent address, much valuable educational work has been done, so that the Ontario settler, prospector, miner, tourist, lumberman and others have a far keener sense of responsibility and respect for law than was true of a decade ago. Much might be said regarding Quebec to indicate a similar awakening of Government and people to the necessities of forest protection.

British Columbia, which a few years ago inaugurated an aggressive forest service, is obtaining some good results, particularly in the long-needed survey of the amount and quality of timber available, and in the organization of a protective system against fire. Quebec, New Brunswick and Nova Scotia are exhibiting a keen regard for their forestry responsibilities, while mutual associations of lumbermen for protective work over their own limits have proved so effective and economical as, doubtless, to lead to many such combinations in the near future.

The most influential agency in the advancement of forest conservation in Canada, is, of course, the Dominion Forestry Branch of the Department of the Interior. No argument more forcible can be found than the record of its work for several years past. The administration of the Forest Reserves, the exploration of public lands to determine those which are non-agricultural and which should be, therefore, kept back from settlers, the establishment of the invaluable Forest Products Laboratory at Montreal (which assists manufacturers in making the best uses of our native timbers) these are tasks dictated by necessity and carried out with skill.

To select only one of the many concerns of the Dominion Forestry Branch—that of fire patrol—it is instructive to find that while the forest reserves have been given as much protection as resources will allow, the Branch has taken under its care the inspection of fire patrol in the three Prairie Provinces *outside* the reserves. The area involved is stupendous. It includes, for instance, the forests of Southern and Northern Manitoba, The Pas, Great Slave, Mackenzie, Revelstoke and other territories. In this outside service, 202 rangers are employed under twelve chief rangers and to such excellent effect as is testified by the last two years' reports.

All these instruments, Governmental and commercial, gradually are reducing the destructiveness of forest fires. It is no compliment to the sagacity of the Canadian people that far more lumber should be abandoned to smoke every year than is used for the service and enrichment of the whole country. The really alarming feature of this destruction is not that it makes extravagant inroads upon some illimitable national asset, but that it rushes the nation towards a day of

timber bankruptcy. Canada's merchantable timber is estimated at about *one-quarter* that of the United States. All the trees in all the forests of Canada would last the population of the neighboring Republic just seven years. A recent Ontario estimate is that the timber of the province will serve at the present rate *thirty years*. Some may take issue with the brevity of these periods, as forecast, but they all point to the fact that authorities, far from taking Canada's timber as "inexhaustible" are able to set an approximate date for its *exhaustion*.

With such prognostications, the cheering fact is that they are *conditional*, and that the conditions are within compara-



Fire guard and telephone lines across open spaces

tively easy reach. What has been done already in forest fire prevention has had a splendid value as the basis for enlarged effort. Forests can be rendered *almost fireproof*. European states, by effective fire ranging, telephone lines, etc., and strict administration, scarcely know what a big forest blaze looks like, although it must be admitted that their forest protection is much simplified by local conditions, as compared with Canada. That campers and other forest users should be permitted to cause millions of timber losses through unextinguished camp-fires, carelessness in smoking, etc., sounds like the essence of folly, and yet every year the main cause of bad fires in many parts of the Dominion is due to this same thoughtless itinerant of the woods. That railways should disregard their own and the public's interests by inviting fires on or near the right of way by unequipped locomotives or lack of fire-guards, or "speeders" to follow up trains would seem incredible in a progressive country, had we not become resigned to some of these patent deficiencies as an immovable tradition.

That all other of the fire causes, except lightning, should be eliminated by strong laws and strong administration, by the encouragement of lumber and railway companies to co-operate in various ways, by strict punishment of individuals for carelessness in the woods, would seem as obvious and as desirable as any other act of self-preservation.

STRIFE IN THE BUILDING TRADES.

How Employers are Hampered and Overcharged by the Trade Unions.

"The installation of metal trim in buildings belongs to us," say the business agents of the Carpenters' Unions. "No," reply the business agents of the Structural Iron Workers, "the A. F. of L. also gives us the right to 'lay on our hands.'" "Not so fast there, pals," speak up the business agents of the Sheet Metal Workers' Unions, "we also get a slice of that 'metal trim pie,' and thus began the fight over the 'spoils of war' in the building trades of Indianapolis, between the heads of the Carpenters', Iron Workers' and Sheet Metal Workers' Unions.

No question of wages, hours or conditions of employment, or other matters in which either builder or contractor are interested or over which they have control are involved in these jurisdictional disputes, but hundreds of men who need and want work are involuntarily thrown out of employment while building operations are needlessly tied up.

The situation summed up, has practically amounted to this—a carpenter ordinarily installed metal trim at a wage of 55 cents per hour, but the iron workers claimed the right to "lay on their hands" at an additional wage cost of 70 cents per hour, while the sheet metal workers claimed the same exalted right and demanded an additional wage payment of 55 cents per hour for being accorded this privilege. The carpenter, meanwhile, stood aside and directed the others how and where to "lay on their hands," thus unnecessarily requiring a total wage payment of \$1.80 per hour for work that one man could efficiently do at a cost of 55 cents. Now the iron workers and sheet metal workers propose to eliminate the carpenters, by claiming complete control over "metal trim."

Such conditions start an endless chain of higher costs in their resulting restrictions in both production and consumption, and work an offensive economic wrong upon the community. Structural iron workers, we are told, consider it a hardship to drive 100 rivets per day, whereas 200 to 400 rivets per day is an easy task under open shop conditions. Carpenters used to hang on an average of one door per hour, or eight to ten per day. Under union conditions four doors per day of eight hours is considered by the carpenters to be a good day's work. Brickmasons used to lay 2,000 bricks per day of ten hours, at a wage of \$3.00 to \$4.00 per day. Under

existing union conditions, with a wage approximately \$2.00 per day higher for two hours less work, the number of bricks laid per day has fallen to fewer than half the former number.

The foregoing examples of the abnormally increased and excessively uneconomic costs of construction under closed shop conditions are but a few of the many similar instances which could be cited. These conditions will continue in force and effect so long as the builder and architect insist upon or tolerate a union labor clause in a building contract. Such clauses do not prevent strikes; they invite them, and have no other effect than to further aggravate the constant family wrangles and jurisdictional quarrels between the "business agents" of the unions and which have been the source of continuous and needless strife in the building trades throughout the country. Civic and commercial bodies generally should take cognizance of the situation, to the end that they may co-operate in discouraging conditions which are so demoralizing and detrimental to the equitable transaction of business.—*Associated Employers of Indianapolis.*

GOOD ROAD FACTS.

A community can safely be judged by the kind of highways it maintains.

The greatest chasm between the producer and the consumer is the mud hole.

Production must cease when the transportation costs eat up the profits.

There is something radically wrong with the farmer who is opposed to good roads.

Without good roads there can be no development that will be permanent and enduring.

Bad roads keep children away from school and impair the efficiency of church work in a community.

The elementary principles involved in improved highways are social and domestic happiness and business economics.—*Maritime Farmer.*

TRADE WITHIN THE EMPIRE.

Trade connections within the Empire are diligently promoted by the Empire Trade and Industry Committee of the Royal Colonial Institute. Among the special undertakings is the finding of British manufacturers for buyers overseas who have formerly been purchasing from German and Austrian houses. In this connection British firms are induced to take up the manufacture of many lines of goods not formerly made within the Empire. The names of persons in the colonies desirous of becoming agents for British goods are sought and forwarded to firms likely to be seeking colonial markets. Colonial products are also sought and brought to the attention of importers and consumers in Britain.

The activity of the Institute during the past four years has done much to further trade within the Empire. Its disinterested agency has inspired confidence and has imparted commercial information directly beneficial to buyers and sellers while broadly advantageous to the Empire. The special needs and also the special opportunities of the war have led to the establishment of several new lines of commercial service. The committee desires correspondence from all who are directly or indirectly interested in establishing or extending any line of inter-Imperial trade. Its organization and varied resources are placed at the disposal of manufacturers, exporters, importers or agents trading or seeking trade within the Empire. All communications to the London office are fully considered. This is a line of effort that should receive every encouragement. It does not involve taxing, obstructing, or burdening any class, and the trade thus promoted must be mutually beneficial.—*Toronto Globe.*

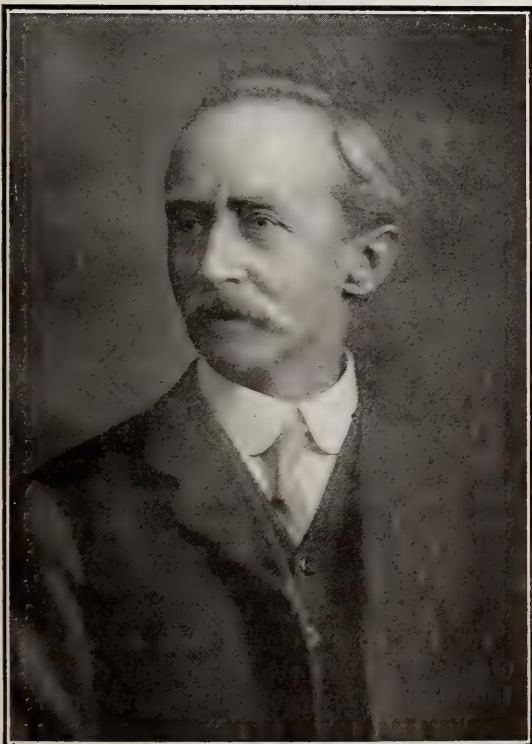
MANUFACTURERS MEET AT MONTREAL

Mr. T. P. Howard Sees Better Times Ahead—The Influence of the Made-in-Canada Campaign—Prospects after the War Discussed—Officers and Committee Appointed

“WE have all felt to a greater or less degree the general depression of business,” said Mr. T. P. Howard, retiring Chairman, at the annual meeting of the Montreal Branch, which was held in Montreal on May 6th. “This was probably at its worst prior to the outbreak of war, when the agriculturists of Canada were going about with long faces at the thought of small crops and low prices, when the retailers were overstocked with goods, and when the manufacturers were trying to figure out how they could keep their men employed and at the same time not get too far ahead with surplus stock. Then came the war to provide a highly ‘legitimate’ excuse for deferring obligations. The manufacturer was undoubtedly up against it to finance his business. Now that the tide has turned and we can look forward with some degree of confidence to a return of normal conditions, I think that we can congratulate ourselves on having pulled through the year so well. It is true that quite a number of insolvencies among manufacturers, wholesalers, and retailers have occurred, but the number has been smaller than we expected seven or eight months ago.”

Made-in-Canada.

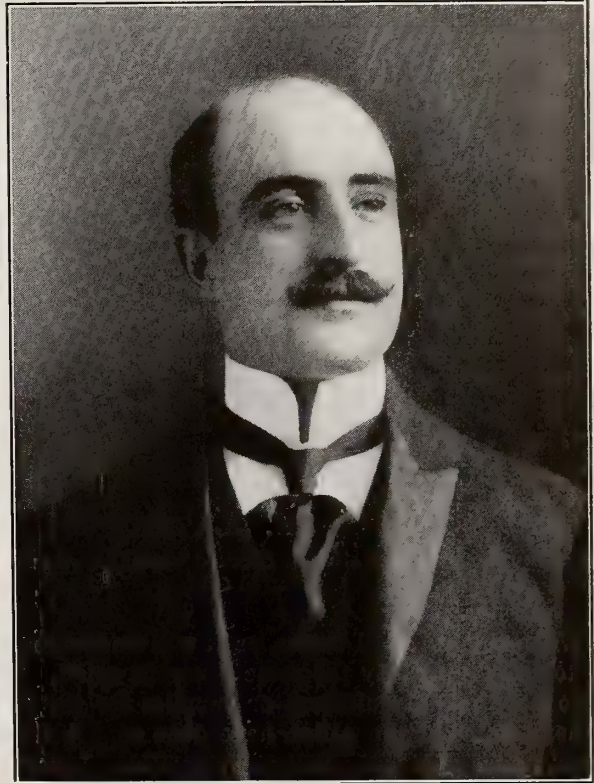
In discussing the made-in-Canada campaign, Mr. Howard said:—“About eight or nine months ago someone resurrected the phrase ‘Made-in-Canada.’ That slogan was taken up with great enthusiasm by the press and by the people. It was criticized and abused by those who were interested in so doing, and by others who could not see beyond their desire to criticize; but, nevertheless, ‘Made-in-Canada’ has been the means of providing employment for many workmen during the past winter. Manufacturers, whose product is such as to draw a greater patronage by this means, will make every endeavor to hold that additional trade and increase it by the output of a high quality of goods at the best prices possible.



MR. T. H. WARDLEWORTH

National Drug and Chemical Co. of Canada, Limited
Elected Chairman Montreal Branch C.M.A.

“Again, one reason why we have weathered the storm so well has been the great demands for war material and equipment to be sent to Europe as well as for the use of our own Canadian troops, and at this point let me say that I think it



MR. T. P. HOWARD

Phoenix Bridge and Iron Works, Limited. Retiring
Chairman Montreal Branch C.M.A.

a matter for the greatest gratification that the Canadian Government has seen fit to appoint a Commission of three business men of the highest standing to supervise the purchase of all war materials. Finally, I think that our banks are deserving of some credit.

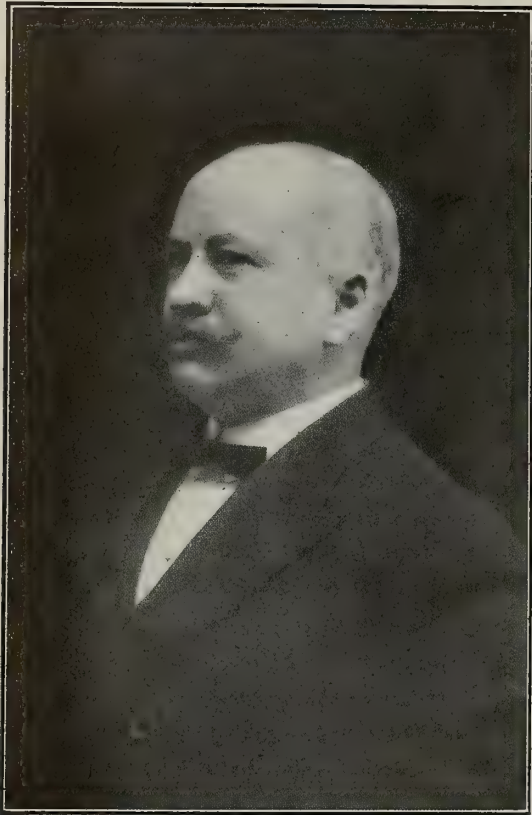
After the War.

“When the war is over a large portion of our shipments abroad will cease, however, unless the manufacturers make provision for entering the export field in a systematic manner. Many manufacturers are unable, by the nature of their product, to export, but for those who can, new and very attractive markets will be opened up; and in the interests of Canada, as well as in their own interest, they should make preparations to take advantage of the opportunities offering.”

Manufacturers and the War.

Mr. Howard made a stirring speech in connection with the war, which was received with great appreciation.

“Let us who, by reason of age, or of family, or other ties, cannot volunteer for active service, do our share and do it willingly. The dependants of those who have gone and those still to leave for Europe, must be provided for in the absence of the breadwinner. I do not think that any class of people anywhere in Canada contributed more generously to the Patriotic Fund in September last than did the manufacturers of Mont-



MR. GEO. A. SLATER

Geo. A. Slater, Limited. Elected Vice Chairman,
Montreal Branch, C.M.A.

real. When the next call comes, as it will undoubtedly come, I look to see you display the same generous spirit. Those of you who have made equipment or supplies for the Canadian and other armies of the Allies, have done so, I believe, with an honest desire to give the best value possible. Investigations have been held, and others will probably be held, but I sincerely believe that the manufacturers of Canada will be found to have done their duty honestly and well."

The reports of the various standing committees showed

an active year's work. Mr. T. H. Wardleworth, Chairman of the Branch Reception and Membership Committee, reported an increase in the membership of five, despite the fact that no less than twenty-six members had gone out of business during the year. The total membership of the Branch now stands at 628. In view of the general trade depression this was considered very satisfactory indeed.

Mr. Wm. Rutherford, Chairman of the Branch Legislation Committee, emphasized the importance of the adoption, by the Quebec Legislature, of the principle of non-taxation of machinery for municipal purposes, and detailed the various measures in which the Association had taken an interest at the recent Session of the Legislature.

Mr. R. H. McMaster, Chairman of the Branch Municipal Affairs Committee, dealt chiefly with the Montreal charter changes which had been submitted to the Legislature, and which the Branch had joined with other organizations, in opposing. Mr. McMaster pointed out the necessity of a change in the present system of administration and urged that the manufacturers should take a strong stand in working for the adoption of a plan which will lead to a stronger and more business-like administration.

Election of Officers.

The result of the balloting showed that the following were elected to office for the ensuing year:—

Chairman—T. H. Wardleworth, National Drug and Chemical Co. of Canada, Ltd.

Vice-Chairman—Geo. A. Slater, Geo. A. Slater, Ltd.—both by acclamation.

Executive Committee—J. H. A. Acer, Laurentide Co., Ltd.; H. W. Aird, The Canada Paint Co., Ltd.; G. F. Benson, Edwardsburg Starch Co., Ltd.; B. W. Coghlin, B. J. Coghlin Co., Ltd.; G. H. Duggan, Dominion Bridge Co., Ltd.; Michael Hirsch, J. Hirsch Sons & Co., Ltd.; Percy S. McKergow, National Brick Co. of Laprairie, Ltd.; R. H. McMaster, Steel Co. of Canada, Ltd.; S. J. B. Rolland, The Rolland Paper Co., Ltd.; Wm. Rutherford, Wm. Rutherford & Sons, Ltd.; C. Howard Smith, Howard Smith Paper Mills, Ltd.; Eugene Tarte, La Patrie Publishing Co., Ltd.; John Lowe, Jr., Montreal Cottons, Ltd. (Valleyfield, Que.).

TORONTO BRANCH ANNUAL MEETING

Industrial Situation Discussed in Retiring Chairman Brigden's Address—Committee Reports Considered—Officers Elected

"THE conditions which we are contending with and which are likely to continue for some time, require the exercise of foresight, restraint and courage," said Mr. Geo. A. Brigden, retiring chairman of the Toronto Branch of the Canadian Manufacturers Association, during the annual meeting held in Toronto, on May 20th. "Our extravagance in the past must be overtaken, and all true Canadians must put their shoulders to the wheel and be prepared to fulfil that which comes to them as a public duty. Necessary war taxes are being cheerfully borne. The extraordinary provisions of the War Measures Act and the Finance Act passed by our Federal Government in August of last year, accepted by the people with scarcely a ripple of excitement, indicate clearly how interdependent we are one upon the other; and at the same time indicate a desire upon the part of the people of this country to give the Government a free hand."

Recalling the good times of the past, the speaker continued: "In contrast to the condition of business two years ago when manufacturers found themselves with more orders than they could fill, during the past year we have had to face the serious

fact that there was not sufficient business offering to keep our establishments in operation. The situation carries with it cause for great anxiety. On the one hand there is the pressure of the responsibility placed upon us as employers to keep our factories in operation; on the other there is the safeguarding of the investments placed in our charge. This has required the exercise of the best possible salesmanship. Salesmanship has been confronted with an enforced policy of retrenchment upon the part of the purchasing public, and with the competition of goods of foreign origin. In many cases the doors of markets hitherto providing a healthy trade, and upon the strength of which capital investments have been made, have been for the time being closed, thus presenting the necessity of entering new fields or slowing down.

"Such industries as are equipped to manufacture munitions and war supplies have taken on a large volume of business of a new character, considerable of which has gone far to make up the loss in business from which they would have suffered through the falling off in home orders. It has been fortunate indeed that so many of our industries have been in a position

to so readily adapt themselves to this class of business, fortunate by reason of the support they have thereby been able to render to our armies in the field, and fortunate by reason of the relief these operations have given to the dislocated condition of business.

"It must be realized that it is in the field of production that Canada is called upon to play its greatest part in the maintenance of British supremacy. Those that cannot serve have also an important part to play in that through the development of their salesmanship they may seek out every possible purchaser for their products in order that Canadian money may be kept in Canadian channels of production. It reflects no credit upon Canada that we should have an unemployment problem to deal with, while at the same time we are sending millions of dollars abroad for the purchase of kinds of goods which Canadian industry and Canadian labor can equally well provide."

New Technical School.

Mr. Brigden pointed out that before the next annual session the new Toronto Technical School would be open and will provide accommodation for 7,500 students, and that its opening would be a reward to the manufacturers who have worked consistently for many years in the promotion of industrial education.

Committee Reports Satisfactory.

The various committee reports were read and showed a year of progress and achievement.

Election of Officers.

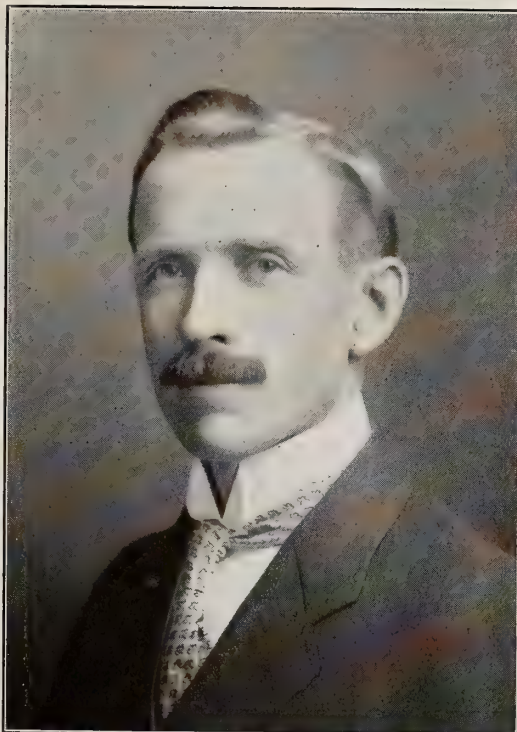
The following officers were elected by acclamation: Chairman, W. C. Coulter, Booth-Coulter Copper and Brass Co., Limited; Vice-Chairman, J. W. Hobbs, Consolidated Plate Glass Co., Limited.

Canadian National Exhibition Representatives.

George Brigden, Brigdens Limited; A. R. Clarke, A. R. Clarke & Co., Limited; John Firstbrook, Firstbrook Brothers, Limited; Edward Freyseng, Freyseng Cork Co., Limited; R. S. Gourlay, Gourlay, Winter & Leeming, Limited; S. Harris, Harris Lithographing Company; George T. Irving, Irving Umbrella Co., Limited; J. S. McKinnon, S. F. McKinnon & Co., Limited; W. C. Phillips, Phillips Manufacturing Co., Limited; F. A. Rolph, Rolph & Clark, Limited; J. O. Thorn, Metallic Roofing Co. of Canada, Limited; T. A. Russell, Russell Motor Car Co., Limited.

Representatives of Toronto Branch to Executive Council.

Geo. Brigdens, Brigdens Limited; A. R. Clarke, A. R. Clarke & Co., Limited; R. D. Fairbairn, R. D. Fairbairn Co., Limited; Thos. Findley, Massey-Harris Co., Limited;



MR. GEO. BRIGDEN

Brigdens Limited, Retiring Chairman, Toronto Branch C.M.A.



MR. J. W. HOBBS

Consolidated Plate Glass Co. of Canada, Limited, Elected Vice-Chairman Toronto Branch C.M.A.

John Firstbrook, Firstbrook Bros., Limited; S. Harris, Harris Lithographing Company; J. W. Hobbs, The Consolidated Plate Glass Co. of Canada, Limited; C. B. Lowndes, The Lowndes Co., Limited; J. S. McKinnon, The S. F. McKinnon Co., Limited; T. F. Monypenny, Imperial Varnish and Color Co., Limited; S. R. Parsons, British American Oil Co., Limited; W. C. Phillips, Phillips Manufacturing Co., Limited; Thos. Roden, Roden Brothers; T. A. Russell, The Russell Motor Car Co., Limited; W. B. Tindall, Parry Sound Lumber Co., Limited.

Members of Toronto Branch Executive Committee.

L. L. Anthes, Anthes Foundry, Limited; Geo. J. Cliff, Canadian Salt Co., Limited; John Firstbrook, Firstbrook Bros., Limited; C. V. Harding, Toronto Carpet Mfg. Co., Limited; A. H. Jeffrey, Polson Drydock & Shipbuilding Co., Limited; W. C. Laidlaw, R. Laidlaw Lumber Co., Limited; J. B. McCarter, Eclipse Whitewear Co., Limited; T. F. Monypenny, Imperial Varnish and Color Co., Limited; J. P. Murray, Canadian Oil Producing & Refining Co., Limited; J. A. Northway, John Northway & Sons, Limited; J. A. Riordan, Standard Sanitary Mfg. Co., Limited; Thos. Roden, Roden Brothers; John Turnbull, Nasmiths, Limited; J. Westren, Dunlop Tire & Rubber Goods Co., Limited; A. L. Young, Henry Hope & Sons of Canada, Limited.

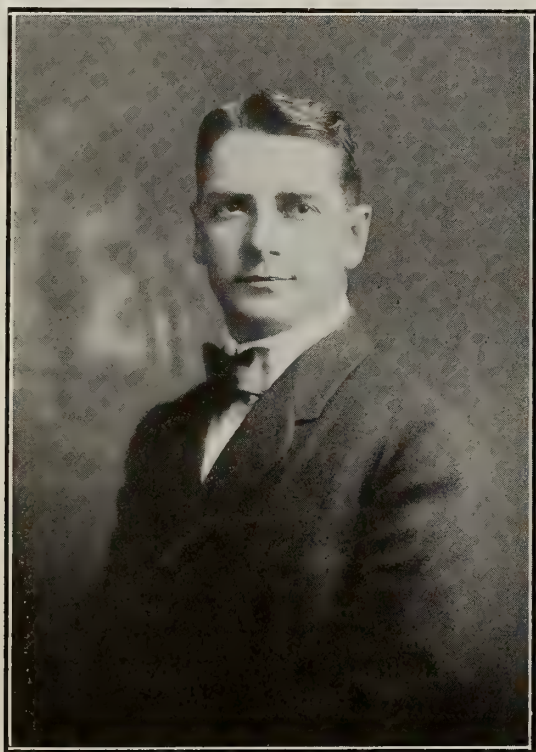
A REMARKABLE TRIPLE ALLIANCE.

There is a very remarkable triple alliance in Western Canada just now. The three components are: (1) Millions of acres of unused land; (2) a frantic appeal by the Dominion Government for the production of all possible farm produce; (3) parades of ten to fifteen thousand unemployed men idly gaping at each other in a single city during the middle of the seeding season. It is easy to see that our colonization system is badly out of joint.—*Nor' West Farmer*.

HAMILTON BRANCH C.M.A. ANNUAL MEETING

The Abnormal Industrial Developments of the Year Discussed—Export Trade Considered
—Support of Local Militia Advocated—Officers Elected

THE issue of a circular letter to all city manufacturers, asking them to urge upon every young man employed by them the importance of enlisting in the local militia, was authorized at the Annual Meeting of the Hamilton Branch of the Canadian Manufacturers Association, which was held in Hamilton on May 15th.



MR. H. H. BIGGERT
International Harvester Co. of Canada, Limited,
Retiring Chairman, Hamilton Branch
C. M. A.

The retiring Chairman of the Branch, Mr. H. H. Biggert, in giving a review of the work done during the past year, showed that considerable progress had been made in spite of adverse industrial conditions. Dealing with the efforts made to increase exports, Mr. Biggert said:

"Shortly after the war broke out, an effort was made by the Board of Trade to arouse interest in the export trade with the South American Republics. Resolutions were forwarded to the Head Office, Toronto, calling attention to the opportunities in South America in view of the practical exclusion of German trade, and other European countries. These resolutions were incorporated in circulars by the Head Office, and also given attention in INDUSTRIAL CANADA, but owing to the disturbed financial conditions in South America the matter did not receive much encouragement. However, there is now being organized a Canadian Manufacturers Export Association, which we hope will result in an increased growth of our export trade.

"In connection with the activities looking towards increased export business, suggestion has been made that the Government undertake to locate at one central point or at several points, a Commercial Museum, in which would be shown the various commodities purchased by the countries to which Canada would expect to export. This matter was given discussion by our Executive, and a resolution was forwarded to Sir George Foster, advocating the establishment of

such a Museum, and setting forth the claims for Hamilton as the logical location."

He referred to the fact that manufacturers of Hamilton had secured millions of dollars' worth of war orders and that more were expected, as the factories of Hamilton were well adapted for this commission.

Mr. Biggert referred at some length to the Eastern Rate Case:

"The Canadian Freight Association, as you all know, has applied, on behalf of some of the railroads, to the Board of Railway Commissioners for permission to make a general increase of freight rates in Eastern Canada. Excepting the general industrial conditions at the present time, this is one of the most important matters that has ever been brought before the Board. Perhaps some of our members do not realize the seriousness of this application which may account for the apathy on the part of some towards the same. Some of the manufacturers, who do not deliver their goods, may not be as vitally interested as those who have to pay freight, but at the same time we believe it is to the interest of this community to protect their customers against this application of the Freight Association. If the railways are not sufficiently remunerated in handling this business at a fair margin of profit under present rates, they are entitled to the increase, but on the other hand, if they are asking for this increase because of operating losses entailed through business depression, they are not entitled to it. All that we can ask is that a thorough audit be made by the Railroad Board, and that their decision be based on the result of their findings and to the best of our knowledge this investigation has been promised."



MR. R. R. MOODIE
The Eagle Knitting Co., Limited, Elected Chairman of the Hamilton Branch C.M.A.

Resolutions of condolence were passed in regard to the deaths of three members of the Branch—J. M. Young, J. W. Lamoreaux and W. Marshall.

A suggestion was made to adopt a daylight saving scheme, but while the majority of members were agreeable to opening their factories one hour earlier in the morning and closing them one hour earlier in the afternoon, they were opposed to having the clocks set back.

Total membership of the Branch is now 204, and the financial report showed a substantial cash balance. The elections resulted as follows:

Officers—R. R. Moodie, Chairman; F. A. Merrick, Vice-Chairman; H. E. Waterman, Secretary-Treasurer.

Executive Committee—H. H. Champ, Geo. C. Coppley, W. R. Dunn, Henry Bertram, J. A. McMahon, A. C. Garden, W. H. Marsh, G. H. Douglas, K. Bethune, H. P. Hubbard.

Ex-Officio Members—H. H. Biggert, Cyrus A. Birge, H. J. Waddie, R. Hobson, A. F. Hatch.

Finance—G. H. Douglas, Chairman; H. H. Champ, R. M. Roy, C. W. Sherman, K. Bethune, Cyrus A. Birge.

Membership—K. Bethune, Chairman; W. N. Currie, J. A. McMahon, R. M. Roy, C. A. Murton, G. E. Main.

Municipal and Legislation—A. C. Garden, Chairman; W. H. Marsh, J. W. Millard, D. B. Wood, Geo. A. Simpson.

Reception and Entertainment—H. P. Hubbard, Chairman; A. H. Tallman, H. G. Wright, P. M. Yeates, C. M. Doolittle, F. M. Hatch, C. A. Murton.

Technical Education—H. J. Waddie, Chairman; F. R. Close, C. R. McCullough, W. S. Burrill, R. C. Fearman, R. A. Robertson, F. J. Howell.

Transportation—W. R. Dunn, Chairman; F. H. Whitton, A. F. Hatch, C. A. Hunter, Henry Bertram, F. W. Dean.

Executive Council of Association—H. H. Champ, A. F. Hatch, H. J. Waddie, Geo. C. Coppley, H. H. Biggert.

Parliamentary, H. J. Waddie; Insurance, J. W. Millard; Railway and Transportation, W. R. Dunn, A. F. Hatch; Tariff, H. H. Champ; Technical Education, R. A. Robertson, F. J. Howell, F. A. Merrick; Membership and Reception, K. Bethune, H. L. Frost, J. A. McMahon.

BUYING AGENTS FOR ALLIED GOVERNMENTS.

(From Trade and Commerce Department Weekly Report, May 17th.)

A list of the names of the purchasing agents for military purposes of the Allied Governments was published in Weekly Bulletin No. 575 for the information of Canadian firms. As some doubt may exist as to whether this list still holds good, it has been considered advisable to reproduce a similar list with any necessary amendments, as follows:—

International Purchasing Commission, India House, Kingsway, London.

British—

Col. A. G. Barton and Mr. F. W. Stobart, Ritz-Carlton Hotel, Montreal.

French—

Hudson Bay Company, 56 McGill Street, Montreal.

Capt. Lafouilloux, Hotel Brevort, New York.

Direction de l'Intendance, Ministère de la Guerre, Bordeaux, France.

Russian—

Messrs. S. Ruperti and Aleksieff, care Military Attaché, Russian Embassy, Washington, D.C.

MARITIME PROVINCES TAKE THE LEAD IN TOWN PLANNING.

(From Commission of Conservation Bulletin.)

A Town Planning Act has been passed into law in Nova Scotia which will revolutionize the methods of developing real estate and controlling building operations in that province. The Act is to a large extent compulsory and is in advance of anything of the kind in the world.

Under the Act a Local Town Planning Board must be appointed in every urban and rural municipality, and a town planning controller has to be appointed for the whole province. No street can hereafter be laid out, nor any sub-division made unless the plans are approved by this Board. Within three years every Board must either prepare a town planning scheme or a set of town planning by-laws with the following minimum requirements:

(1) The distance between buildings to be not less than 60 feet and up to 100 feet on opposite sides of existing streets, both in respect of new buildings and reconstructed buildings, and to be not less than 80 feet on new main thoroughfares, whatever the width of the street.

(2) Land to be reserved for new main thoroughfares not less than 60 feet in width, and provision made for allowing narrow streets of from 24 feet to 40 feet where not required for through traffic.

(3) The number of dwellings to be limited on each acre, all windows of dwellings to have adequate light and air, separate areas to be prescribed for dwellings, factories, stores, etc.

Property is not to be deemed to be injuriously affected for purposes of compensation by reason of the following restrictions on its use, if the Commissioner of Public Works is satisfied that they are reasonable for the purpose of securing amenity:

(1) Prescribing space about buildings.

(2) Limiting the number of buildings to the acre.

(3) Limiting the height of buildings.

(4) Prescribing the use or character of buildings, i.e., whether the land shall be used for dwellings, factories, etc.

It is an essential part of the Act that there shall be co-operation between municipalities and owners and between adjacent municipalities. Ample safeguards are provided to prevent any person erecting buildings or sub-dividing land so as to contravene a proposed scheme or by-law, while either is being compared. The local board has power to buy land up to 200 feet in depth on the frontages of new roads or reconstructed roads. The price of any land to be expropriated must be the market value and no extra allowance is to be made for compulsory purchase. The Act has been drawn up in consultation with the Commission of Conservation and immediate steps will be taken to put it in force in the province.

New Brunswick.

Although Nova Scotia has now the most advanced Act, New Brunswick is likely to give birth to the first statutory town planning scheme in Canada under its Act of 1912. The city of St. John has appointed a Commission to prepare a scheme and steps are being taken to deal with an area of 10,000 acres.

REGINA'S FIRE LOSS.

While the fire loss of the City of Regina has been heavy in the past, the report of the Fire Chief for 1914 shows a considerable improvement. For that year the per capita fire loss was 90c., based on an estimated population of 43,000.



TRANSPORTATION



By J. E. WALSH

A STRONG plea has been made, particularly by the implement manufacturers, to the Board of Railway Commissioners to disallow the recent advance in export rates on their goods. It has been forcibly pointed out that manufacturers have been urged by the Government to do everything possible to develop and extend our foreign trade and that, therefore, this action on the part of the carriers does not indicate a disposition to help in this direction.

The following article, taken from *The Traffic World*, Chicago, of May 15th, 1915, throws some interesting light on this subject:

Export Rates and Foreign Trade.

The National Implement and Vehicle Association, through Attorneys Walter E. McCornack and Samuel D. Snow, has filed with the Interstate Commerce Commission a complaint protesting against the advance of three cents a hundred pounds in the export rate on agricultural implements to the Atlantic seaboard. There are one or two points in the complaint worthy of especial notice. One is that the railroads operating between Chicago and New York and other Atlantic ports, on a plea that a general increase in all rates was necessary in order to furnish them sufficient revenue to operate, asked for a five per cent. increase on all commodities, including export traffic in agricultural implements. The five per cent. increase was granted, but now the carriers have made a still farther increase on this traffic, representing a total of about twelve per cent. As to whether the additional increase is justified, it is for the carriers to establish and the protestants to refute, but there has been an element introduced into the case that differentiates the argument from those usually employed. This is the second point to which we referred. It is one of public policy, the complainants arguing that the additional increase will put American manufacturers and shippers at a disadvantage in the competition for European trade.

The manufacturers of this country, it is pointed out, have been urged to exert their utmost energies to develop their foreign trade and to take advantage of present conditions to secure a substantial share in the world's commerce. The American manufacturers of agricultural implements, despite many handicaps, have been fairly successful in building up a foreign trade and prior to the European war had secured a profitable market for their products abroad. At the conclusion of the present war in Europe, there should be a wonderful opportunity for a further extension and development of this trade. There is, however, a strong market competition in this line from foreign competitors. The American manufacturer in the Middle West is obliged to pay the railroad freight on his export shipment to the Atlantic port of transshipment and then pay the freight for the ocean carriage, together with high rates of marine insurance, foreign custom duties, port charges, etc. This represents a heavy preliminary expense before his goods arrive at the foreign markets. None of this expense is borne by his foreign competitor.

Whether this be a legitimate ground for refusing the increase or not, or whether, if so, the facts are as represented, is, of course, for the Commission to decide. Without any desire to influence that body, but merely for the purpose of showing the carriers the other side of the case, if they have not already seen it, it perhaps will not be amiss to reprint the

following, which recently appeared in "The Americas," published by the National City Bank of New York, under the caption, "What the railroads can do to promote foreign trade":

"The railroads and other internal transportation systems of a country have it in their power to do much more to aid its manufacturers to market their goods in foreign countries than one is apt to realize until he has seen what Germany and England have done to make it possible for their products to get to the seaboard and loaded upon ships at the saving of every possible penny of cost, in order to shave down the competitive prices they make to foreign customers.

"Germany has studied out the problem of international transportation for the service of its foreign commerce in all its scientific details. Great railway trunk lines co-ordinate with systems of cheap water transportation in accordance with a completely thought-out plan of commercial strategy, so that Germany's seaports are 'supported' by transportation facilities that afford ultimate economies in the bringing into Germany of the raw materials needed from abroad, and the carrying out into world-trade the products of German manufacture. And not only this, Germany, with its state-owned transportation lines and its influence over the others, has made its schedules of railway freight rates as much a part of its protective tariff system as are its customs duties. Germany differentiates against foreign manufacturers and against such producers of raw materials as compete with German industry by charging protective duties at the custom houses; it discriminates in favor of German manufacture by giving special concessions in both domestic and foreign business on railway rates; it helps particular industries that are hard pressed in competition on the price basis in foreign trade, by low freight rates to the seaboard on export merchandise that goods moving in domestic trade cannot obtain. Germany is said to carry 63 per cent. of its rail freight traffic at special rates for the purpose of artificially assisting German industries by discriminating against foreign goods.

"To build up its merchant marine, it has caused effectively low rates on shipbuilding materials to be given on transportation of these to German shipyards.

"It must be said, in order to have a full understanding of the conditions and necessities surrounding the problem of transportation in connection with foreign trade, that every one of the great exporting countries of Europe uses discrimination in railway rates without any hesitation to favor its own national industries in world-trade competition."

It may well be that the Commission will not see its way clear to decide in favor of the complainants on the basis of this foreign trade argument—though the latitude of reasonableness of freight rates is growing wider and wider—but the appeal might nevertheless have some force with the railroads themselves. They can take this argument into consideration in making export rates if they choose, though the Commission might not. We are not saying that they should volunteer a reduction in this case, for there may be other and stronger elements that control and we have nothing to say as to the merits of the case. But we do say that there is no reason why the railroads should not be governed, if otherwise possible, by the dictates of patriotism and development of business.

STEAMSHIP SAILINGS IN JUNE

The following are the ocean sailings from Canadian ports during June:—

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, June 9; From Victoria, *Niagara*, June 9.

British West Indies.

To Bermuda, St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad and Demerara—Royal Mail Steam Packet Company: From Halifax, *Chignecto*, June 4; from St. John, *Caraquet*, June 20.

To Bermuda, St. Kitts, Antigua, Barbados, Grenada, Trinidad and Demerara—Royal Mail Steam Packet Company: From St. John, *Chaudiere*, June 6; from Halifax, *Chaudiere*, June 18.

China.

To Hong Kong—Blue Funnel Line: From Victoria, *Talhybius*, June 2; *Titan*, June 30.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, June 9; from Victoria, *Niagara*, June 9.

Great Britain.

To Liverpool—Furness, Withy & Co., Ltd.: From Halifax, *Durango*, June 15.

To London—Furness, Withy & Co., Ltd.: From Halifax, *Appenine*, June 3; *Messina*, June 15; *Caterino*, June 25.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, June 9; from Victoria, *Niagara*, June 9.

Japan.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, *Talhybius*, June 2; *Titan*, June 30.

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, *Niagara*, June 9; from Victoria, *Niagara*, June 9.

Philippine Islands.

To Manila—Blue Funnel Line: From Victoria, *Talhybius*, June 2; *Titan*, June 30.



By J. R. K. BRISTOL

THE following Customs rulings were issued by the Department of Customs on the 11th of May, 1915:

Board of Customs Decisions.

"*Silkene gum*," per sample, consisting of over 80 per cent. starch and remainder dextrine, declared dutiable under Tariff Item 39.

Hand piece for use in connection with dental engines, declared to be entitled to entry under Item 466.

Diamonds, mined in British South Africa, and cut and polished in Amsterdam, when imported from the United Kingdom, declared to be subject to duty under the general tariff.

Bottles, containing champagne and wine, imported under the French Treaty, declared to be subject to war tax.

Velvets of pure silk pile with cotton back, when imported from France, declared not to be entitled to entry under Schedule C., French Treaty.

Tweezers, per sample, specially designed and constructed for use of dentist, declared entitled to entry under Tariff Item 466.

Departmental Rulings.

Electric welded tubing of steel, per sample, manufactured by the Standard Welding Co., Cleveland, dutiable under Tariff Item 396, when costing over 3½c. per pound.

Tubular seamless bags, about six feet long, open at each end and manufactured of twine, per sample, for use in sugar refineries, dutiable under Tariff Item 549, from 1st January, 1915.

Foil, interlined with paper or paper backed, dutiable under Item 711.

Tariff Changes of British Guiana.

The Customs Tariff of British Guiana has been advanced on flour of wheat or grain other than corn (per barrel of 196 pounds) from 85c. to 90c. under the British Preferential Tariff and from \$1.10 to \$1.15 under the General Tariff—subject to an additional rate in each case of 5 per cent. on such duties.

Tariff Changes of St. Vincent.

All items provided for as dutiable under the Customs Tariff of St. Vincent, 1913, are increased in duty by one-fifth (i.e., 20 per cent.), except in the case of the following articles which are not subject to the increase, viz.:

Biscuits and bread of all kinds—Common, fancy.

Butter.

Cattle and other animal foods—Linseed oil cake, linseed oil cake meal and all oil-seed cake and meal.

Cheese.

Coffee—Raw.

Fish—Canned, dried, salted or smoked, pickled.

Grain and flour—Rice; flour, wheaten; meal, Indian meal; oats, pollard.

Lard.

Matches.

Meats—Meat, beef, pork, tongue, salted or cured; pigs' heads and parts thereof, pigs' feet and tails, salted and cured.

Oil—Cotton seed, kerosene, olive, lard and all other kinds used for cooking; oleomargarine and other similar compounds, including butterine and margarine.

Soaps—Common washing, fancy.
Sugar.
Tea.

Provision is also made for the free importation of stores and supplies imported by, or for the use of, any body of Boy Scouts sanctioned by the Governor.

Argentine Republic.

Duty Free—Admission of materials and machinery for the installation of grain elevators.

Under Article 30 of the Argentine Budget Law for 1915, materials of all kinds for the installation of new grain elevators in the ports of the Republic or at the railway stations, in accordance with the provisions of Law 3908 of 1900, and machinery for the same are to be admitted free of duty during the current year. (Board of Trade Journal No. 962, May 6th, 1915, page 397.)

Contracts Affected by French Tariff Changes—Suggestion to British Shippers.

The British Chamber of Commerce in Paris points out that considerable inconvenience has been caused to British firms who had contracted for the supply of hospital gauze during the period of duty-free entry into France, and who had not effected delivery when the duty was reimposed. The Chamber, therefore, desires to warn British shippers that it is unwise to make contracts for delivery upon the basis of exemption from duty, as in many cases such exemption is likely to be merely temporary. It is suggested that a clause should be inserted in contracts stating that the price quoted is subject to the continuance of the existing duty-free entry, or of the existing rate of duty, as the case may be, and that any subsequent change in the tariff will involve a corresponding increase of price. (Board of Trade Journal, Vol. LXXXIX, No. 962, May 6th, 1915, page 375.)

War Measures Embargo on Exports.

The war measures embargo against exports, which was issued by the Government at Ottawa on the 30th ult., and published in the May number of INDUSTRIAL CANADA, will probably require amendment now that Italy has joined in the war on the side of Great Britain and her Allies. Such amendment will likely lift the embargo against exports to Italy in respect to those articles, the exportation of which is now limited so far as Europe is concerned to the United Kingdom, France and Russia.

Exporting Canadian Wool.

It is announced that the Department of Customs has been authorized to issue licenses to export to the United States home grown wool. Such licenses will be subject to guarantees that no part of such wool or its products shall be re-exported from the United States. The arrangement has the effect of opening the markets of the United States to the wool growers of Canada.

Foreign Trade for April.

The total trade of Canada for the month of April, 1915, exceeded such trade for the same month last year by eight and a quarter millions of dollars. While it was about seven millions less than in the same month of 1913, nevertheless it exceeded April, 1912, by about four millions of dollars. The total foreign trade for April for the last four years are as follows:

1912.....	\$61,333,893
1913	72,607,686
1914.....	56,929,254
1915.....	65,221,031

Our domestic exports for the month of April each year as above compare as follows:

	1912.	1913.	1914.	1915.
The Mine	\$2,384,849	\$2,929,884	\$2,681,364	\$2,795,002
The Fisheries ...	235,036	622,336	531,132	710,447
The Forest	1,478,042	1,869,715	1,874,739	1,929,440
Animals and their produce	1,032,168	1,744,648	1,860,666	3,312,498
Agriculture	5,936,313	11,365,018	6,494,911	6,618,443
Manufactures ...	2,601,537	3,478,598	4,295,199	13,221,658
Miscellaneous ...	9,044	6,681	15,060	104,401
Total.....	\$13,676,989	\$22,016,880	\$17,753,071	\$28,691,889

The war measures tariff is having the effect of substantially increasing Customs revenue. Our imports during April, 1915, are about eight and a half millions of dollars less in value than for the month of April, 1914. Nevertheless the Customs duties collected amount to \$5,986,662 for April, 1915, as compared with \$6,458,27 for April, 1914.

NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated for manufacturing purposes:—

Companies.	Capital.	Site.
Dominion Road Mach'y Co., Ltd..	\$300,000	Goderich, Ont.
The Ontario Glove Mfg. Co., Ltd..	40,000	Berlin, Ont.
Standard Primer & Fuse Co., Ltd.	150,000	Toronto, Ont.
Armstrong Cork & Insulation Co., Ltd.	50,000	Montreal, Que.
The Canadian Drill & Chuck Co., Ltd.	20,000	Toronto, Ont.
Julius Kayser & Co., Ltd.	25,000	Sherbrooke, Que
A. N. D. Pipe Co., Ltd.....	50,000	Toronto, Ont.
Mico Bottling Co., Ltd.....	40,000	Toronto, Ont.
Lion Polish Co., Ltd.....	40,000	Toronto, Ont.
Merle-Peters Arms, Ltd.....	100,000	Winnipeg, Man.
Ideal Furniture Co., Ltd.....	50,000	Breslau, Ont.
Safety Window Co.....	100,000	London, Ont.
Hamilton Lock-Nut & Specialty Mfg. Co., Ltd.....	500,000	Hamilton, Ont.
Canada Woodenware, Ltd.....	40,000	Toronto, Ont.
The Seamless Rubber Co., Ltd....	40,000	Toronto, Ont.

GLASS AND CHINA TRADE GOOD.

"Our shipments for the last four months are greatly in excess of shipments last year, this month being a record breaker," writes Mr. Evan F. Stearns, Secretary-Treasurer of the Glass & China Decorators, Limited, Montreal. "This fact should, it seems to us, be good evidence that conditions in Canada are not nearly so bad as painted by some people, as we manufacture only luxuries and are selling more this year than last."



INSURANCE

A New Fireproof Material.

IT is claimed for a new material, the basis of which is cotton, that it is both fire and waterproof, that it can be manufactured into tiling for floors and shingles for roofs, and that its use will render bungalows, garages and like structures fireproof. It is also said to make soles for shoes that are superior to leather so far as wearing and lasting qualities are concerned, and cheapens production, as it needs neither pegs nor stitching, but can be attached with cement. It can also be used in the making of toys, automobile tops, furniture, reins, saddles, horse collars, tires, and the like. In fact, it is good for so many things that one naturally looks to see if Colonel Sellers is not exploiting it, but finds instead the name of an ordinary mortal named Busky, who is said to be a manufacturer; but of what is not stated. The gum used in the construction of the material melts at 120 degrees Fahrenheit.

Furniture Factory Fires.

The fire record of the N.F.P.A., published last April, contains some interesting figures concerning sprinkler efficiency in furniture factory fires, which are summarized herewith: In 17 years, out of 14,714 fires in sprinklered risks reported to the association, 426 were in furniture factories. Of these, the sprinklers extinguished the fire in 273 instances, or 64.1 per cent.; held it in check in 115, or 27 per cent.; making a total of 388 cases, or 91.1 per cent. of satisfactory operations, and failed to operate satisfactorily in 38 instances, or 8.9 per cent.

The record of unsatisfactory operations is distributed under the following classifications: Water shut off sprinklers, 6; generally defective equipment and unsprinklered portions, 12; defective water supply, 2; sprinkler system due to freezing, 3; faulty building construction, concealed space or vertical openings, 2; obstruction to distribution, 5; hazard of occupancy too severe for ordinary sprinkler equipment, 6; exposure of conflagration, 2;—Total 38.

No doubt similar records with respect to sprinklered furniture store fires would be equally interesting.

Business Insurance.

"Business insurance is the instantaneous creation of a fund available immediately upon the arising of an inevitable crisis that may be long delayed or that may come at any moment. As far as that particular crisis goes, the completed fund is at once established, and at the same moment a new element of security is added to the business protected. Certain possibilities of danger to the firm are wiped out, and the credit rating of that firm is so much the stronger. Bankers, manufacturers and wholesalers know the value of this insurance, and they arrange their credits accordingly. The financial standing of the protected firm is improved, and as a natural result the earning power is increased. The negotiable cash assets represented on the books by business insurance increases year by year, not only on account of the higher loan values, but also by reason of the profits that accrue to the policies, and which in many cases are added to their value."—Mr. J. K. McMaster.

State Fire Insurance.

New Zealand is frequently a prize exhibit of the advocates of state insurance, possibly, it is suggested, because it is so far away that their mis-statements as to its success cannot be easily discovered. Official figures are now at hand showing that state fire insurance has not been much of a success in New Zealand, as the department collected only \$265,000 of \$2,039,000 of premiums in the country. The average rate has increased ever since the state entered the business, going from \$3.12 per capita in 1902 to \$3.50 in 1912, while the per capita loss by fire for the past three years has been \$2.54, which is even higher than on this continent. Much of this condition is attributed to lax methods of the governmental office in handling and paying losses, as usual, largely due to political influence, and to the failure of the government to inspect risks until recently. It is not without interest that where governmental interference with insurance has been most pronounced, in America and New Zealand, the fire waste is greatest.—*The Chronicle*.

Converts to Stock Company Insurance.

An important list of 65 industrial corporations in the United States which between July 1, 1914, and March 1, 1915, have transferred their insurance from the factory mutuals to the stock companies co-operating through the Factory Insurance Association is published by the *Boston Standard*. The total amount of insurance represented by these 65 concerns is \$62,693,500. Commenting editorially upon this list, our contemporary writes: "The list shows that the advantages of the definite cost and undoubted security of stock company insurance are regarded by the business men who have made the transfer as outweighing the advantage offered by factory mutual insurance of a possible saving in cost. No one disputes the good work done by the factory mutuals in encouraging superior building construction and the installation of fire prevention devices. But this does not make their insurance, even though it should cost a little less, preferable to that of the stock companies, for there is no certainty that it will cost less and there is the possibility that it may cost much more. The Salem fire demonstrated that the business of the mutuals is not exempt, as it has so often been claimed to be, from the conflagration hazard. Granting all that can possibly be said as to the exceptional nature of the circumstances under which the Naumkeag mills were destroyed, the fact of their destruction remains, and business men carrying factory mutual insurance must naturally ask themselves; how much do the mutuals stand to lose upon other risks exposed to a conflagration hazard far greater? And, so far as they are concerned, the question remains unanswered. They can only guess. But they have learned that the mutuals stand to lose an enormous sum of money on a single risk, and when the chance the mutuals are thus taking is compared with the underwriting conservatism, larger recourses and wide distribution of business of the stock companies, the comparison is all in favor of the latter. When, therefore, the difference, if any, in cost is likely to be small, there is no reason for surprise that shrewd business men should prefer stock company insurance."



LEGISLATION

By F. W. WEGENAST

FOUR of the provinces have already adopted amendments to their Company Licensing Laws, as a result of the John Deere Plow Company decision. No two of the amending Acts are at all alike or show any coincidence of view as to the effect of the decision.

Alberta.

The Province of Alberta has introduced into its Foreign Companies' Act an explicit exception in favor of companies operating under Dominion charters, that is to say, the Act still requires companies of other provinces or other countries to become registered before carrying on business in the province; but recognizes the status of a Dominion company without being registered.

New Brunswick.

In New Brunswick the Act has been amended by changing the word "licensed" to "taxed." The Act as it now stands requires all companies not incorporated in the Province of New Brunswick to be "taxed" before carrying on business in the province. The provisions penalizing untaxed companies and denying them the use of the provincial courts are retained. The intent is evidently to keep the former Act in full operation and effect by the change in terminology.

Nova Scotia.

In Nova Scotia an effort has been made to bring the Act under the guise of a taxation Act by inserting the formula "in order to the raising of a revenue for provincial purposes." The prohibition against unregistered companies maintaining actions was removed, and it should be noted that this change applies not only to Dominion companies, but also to extra-provincial and foreign companies. The Act as it now stands requires all companies to hold a certificate of registration before they "do or carry on" any business in the province, the intention being apparently to inhibit even a single transaction by an unregistered company. No fee is payable upon registration, but in due time the company is required to pay an annual fee. The fact that the Act applies to companies incorporated in the province as well as those incorporated elsewhere, obviates one of the objections upon which the British Columbia Act was held invalid. But the fact that the company's status and right to carry on business in the province depends upon its holding a certificate of registration probably brings the Act within the chief ground of the John Deere Plow Company judgment and renders it invalid as regards Dominion companies.

Saskatchewan.

The Province of Saskatchewan which had in force the same statute, formerly an Ordinance of the North-West Territories, as the Province of Alberta, has gone the extreme opposite of its twin sister province, and instead of excepting Dominion companies in accordance with the John Deere Plow Company decision, has combined the provisions of its Foreign Companies Act with its regular Companies Act, in

a bill which at the time of writing has been read a second time in the Legislature. The bill, if enacted, will require Dominion companies to be registered just as if they were Provincial companies becoming incorporated *de novo*. It is difficult to see by what process of reasoning the province will seek to uphold the Act in a form more drastic than that of the British Columbia Act which was declared *ultra vires*; but Western Legislatures are nothing if not courageous.

Prince Edward Island.

In the Province of Prince Edward Island two decisions have been given by the Supreme Court, by which the Act of that province, passed in 1913, was upheld as prohibiting unlicensed companies from bringing action. Amendments had been introduced in the Legislature by way of embodying the provisions of the British Columbia Act, but as a result of the John Deere Plow Company decision, the amendments had been left over and the Act of 1913 still remains in force. In accordance with the decision of the Supreme Court the business of unlicensed companies is illegal and actions by unlicensed companies will not lie. The cases in question may go to the Supreme Court of Canada.

Companies' Reference.

The Province of Ontario, Manitoba and British Columbia, though no less interested than the other provinces in the result of the John Deere Plow Company case, are awaiting the decision of the Companies' Reference before taking action by way of amendment. The Reference is set down for hearing by the Privy Council in July.

CANADIAN FOOTWEAR IN UNITED KINGDOM.

The market for Canadian footwear in the United Kingdom has been frequently commented upon in reports submitted by Mr. Claude Dyer, the Acting Canadian Trade Commissioner at Leeds. Attention may be called for instance to the information along these lines given in the Trade and Commerce Weekly Reports Nos. 580, 583, 586 and 588. According to Mr. Dyer, the returns now available show that since the date of the above reports a noticeable increase has taken place in the shipments from Canada. During March, 1,465 dozen pairs of boots and shoes (of leather), valued at \$63,475, were imported from Canada. The imports of Canadian boots and shoes (of leather) during this month alone, therefore, exceed the total imports for any period of twelve months during recent years.

FORD PLANT IN WINNIPEG.

The fourth assembling plant and service station of the Ford Motor Company of Canada, Limited, to be built within a year will be put up in Winnipeg, ground to be broken at an early date. The newest Ford building will cost around \$250,000, and will resemble the branch buildings completed this spring in Toronto, London and Montreal. It will replace an older branch building now being used in Winnipeg.



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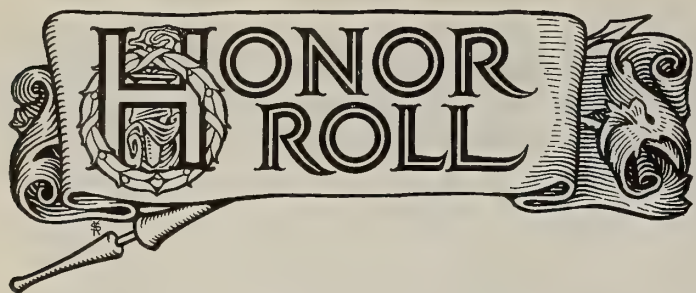
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NOTE.—Owing to limitations of space, only members and managers of manufacturing concerns can be included in this list. INDUSTRIAL CANADA will be glad to receive additional names.

Col. Chas. Smart, Smart-Woods, Limited, Montreal.

Col. John Gunn, Gunns, Limited, Montreal.

Lieut.-Col. J. Bruce Payne, J. Bruce Payne, Ltd., Granby, P.Q.

Lieut.-Col. Wm. Hendrie, Hamilton Bridge Works Co., Ltd., Hamilton, Ont.

Lieut.-Col. R. W. Patterson, Winnipeg Paint & Glass Co., Ltd., Winnipeg.

Lt.-Col. Frank Howard, Brantford Emery Wheel Co., Brantford, Ont.

Lieut.-Col. A. B. Petrie, Petrie Mfg. Co., Winnipeg.

Lieut.-Col. G. F. C. Poussette, Assistant Secretary C. M. A., Winnipeg.

Lieut.-Col. J. J. Carrick, Pigeon River Lumber Co., Port Arthur

Lieut.-Col. J. A. Currie, M.P., Imperial Steel and Wire Co., Ltd., Collingwood.

Lieut.-Col. F. C. McCordick, Frank C. McCordick, St. Catharines.

Lt.-Col. E. W. Rathbun, The Rathbun Co., Deseronto, Ont.

Lieut.-Col. A. J. Oliver, R. McDougall Co., Limited, Galt, Ont.

Lieut.-Col. J. F. L. Embury, Canadian Lock Joint Pipe Co., Regina, Sask.

Lieut.-Col. F. B. Black, J. L. Black & Sons, Ltd., Sackville, N.B.

Major F. J. Dingwall, D. R. Dingwall, Ltd., Winnipeg.

Major W. R. Marshall, Standard Fuel Co., Ltd., Toronto.

Major John McPhee, Barrie Tanning Co., Barrie.

Major Wm. Scully, Wm. Scully, Montreal.

Major Kimmins, E. D. Smith & Son, Ltd., Winona, Ont. (Killed in battle.)

Major Pelly, Steel and Radiation, Ltd., Toronto.

Major Russell Britton, Manager Cowan & Britton, Ltd., Gananoque, Ont.

Major W. R. Turnbull, Robert Duncan & Company, Hamilton, Ont.

Major J. K. Bertram, The John Bertram & Sons, Ltd., Dundas.

Major J. R. L. Parsons, Canadian Lock Joint Pipe Co., Regina, Sask.

Major T. C. Irving, Moffat-Irving Co., Toronto.

Captain Trumbull Warren, Gutta Percha & Rubber Co., Ltd., Toronto. (Killed in battle.)

Captain Harvey B. Evel, Evel Casket Co., Ltd., Hamilton.

Captain W. D. Greer, Consumers Gas Co., Toronto.

Captain J. T. Duguid, Imperial Steel and Wire Co., Ltd., Collingwood.

Captain F. F. M. Brown, College Press, Ltd., Toronto.

Captain C. R. Crowe, Crowe's Iron Works, Guelph, Ont.

Captain Smith, E. D. Smith & Son, Ltd., Winona, Ont.

Captain F. R. Newman, Canadian Fairbanks-Morse Co., Ltd., Toronto.

Captain J. M. Eakins, Canada Grip Nut Co., Ltd., Montreal, Que.

Captain F. P. Duck, D. Acland & Son, Winnipeg.

Captain G. H. Weld, Farmers Advocate, Ltd., Winnipeg.

Captain W. L. Roblin, Winnipeg Telegram, Winnipeg.

Captain R. Steacie, Smart-Woods, Ltd., Montreal.

Captain George D. McLauchlan, McLauchlan & Sons Co., Ltd., Owen Sound, Ont.

Capt. H. C. Trenaman, Domestic Specialty Co., Limited, Hamilton, Ont.

Captain G. F. Grafton, Grafton & Company, Dundas, Ont.

Capt. Victor Nordheimer, The Nordheimer Piano & Music Co., Ltd., Toronto Ont.

Capt. Alexander Campbell, Campbell Steel & Iron Works, Ltd., Ottawa, Ont. (Died of illness).

Capt. Walter A. Harrison, T. H. Estabrook Co., Ltd., St. John, N.B.

Lieut. Harvey Cockshutt, Cockshutt Plow Co., Brantford.

Lieut. Norman V. Cliff, Toronto Salt Works, Toronto.

Lieut. C. H. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Lieut. K. E. Drinkwater, A. B. See Electric Elevator Co. of Canada, Ltd., Montreal.

Lieut. T. E. Ryder, Canadian Fairbanks-Morse Co., Ltd., St. John, N.B.

Lieut. J. V. Young, Hamilton Cotton Co., Ltd., Hamilton, Ont.

Lieut. W. L. McIntosh, Canon Lake Lumber Co., Winnipeg.

Lieut. W. S. Drewry, E. L. Drewry, Ltd., Winnipeg.

Lieut. G. H. Saltmarsh, Metallic Roofing Co., Winnipeg.

Lieut. Wm. Martin, Jr., Manitoba Gypsum Co., Winnipeg.

Lieut. B. M. Green, Smart-Woods, Ltd., Montreal.

Lieut. Jack Woods, Smart-Woods, Ltd., Montreal.

Lieut. Lacey, Steel and Radiation, Ltd., Toronto.

Lieut. Garret, Steel and Radiation, Ltd., Toronto.

Lieut. E. C. H. Moore, Coleman Baking Powder Co., Ltd., Brockville, Ont.

Lieut. Ian Hendrie, Hamilton Bridge Works, Limited, Hamilton, Ont.

Lieut. Geo. C. Wright, E. T. Wright Co., Limited, Hamilton, Ont.

Lieut. W. H. McLaren, McLaren's, Limited, Hamilton, Ont.

Lieut. H. C. Hatch, Canada Steel Goods Co., Limited, Hamilton, Ont.

Lieut. John Galt, Jr., Blue Ribbon, Limited, Winnipeg, Manitoba.

Lieut. R. G. Hutchinson, International Harvester Co., of Canada, Ltd., Calgary, Alta.

Lieut. Donald S. Fisher, Enterprise Foundry Co., Sackville, N.B.

Sergeant Harold Rolph, Rolph and Clark, Ltd., Toronto.

Sergeant W. A. Logie, Smart-Woods, Ltd., Winnipeg, Man.

Corporal A. R. Ackerman, B. F. Ackerman, Son, & Co., Peterboro.

Corporal Stewart L. Young, Young-Thomas Soap Company, Regina, Sask.

Pte. Murton Rugg, E. W. Rugg Co., Winnipeg.

Arthur H. Coles, Edmonton Law Stationers, Ltd., Edmonton.

Pte. A. C. Bertram, The John Bertram & Sons Co., Ltd., Dundas.

Pte. Alex. G. Rosamond, Rosamond Woolen Co., Almonte, Ont.

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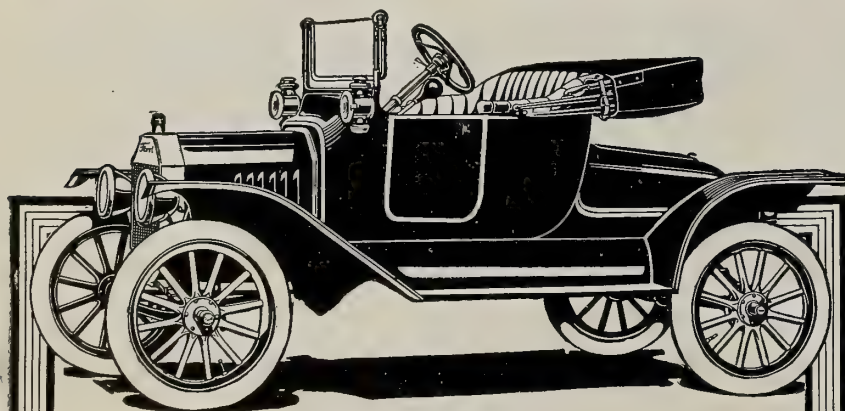
MR. F. E. MUTTON'S NEW POST.

The many friends of Mr. Frank E. Mutton will be interested to hear of his important new connection as Secretary and General Manager of the International Time Recording Company of Canada, Limited. For the past three years Mr. Mutton has been very successful as Managing Director of J. J. Gibbons, Limited, advertising agents, and it is felt that his experience in that capacity, added to his many years as manager of the National Cash Register Company in Canada makes him especially fitted for the direction of the International Time Recording Company, lately reorganized, and whose product is the best known of its kind in the world.

Mr. Mutton is a prominent motorist, a past-president of the Ontario Motor League, and is also very well known in lawn bowling and golfing circles.

MR. M. E. DUNCAN DEAD.

Mr. M. E. Duncan, Vice-President and General Manager of the Canada Car and Foundry Company, died in Montreal in May. The deceased joined the executive of the company and its subsidiary companies three years ago. Previous to that date he was General Sales Agent of the American Car & Foundry Company of St. Louis. He was a resident of Montreal for only a short time, but his death caused widespread regret.



"MADE IN CANADA"

Ford Runabout Price \$540

Your neighbor drives a Ford—why don't you? We are selling more Fords in Canada this year than ever before—because Canadians demand the best in motor car service at the lowest possible cost. The "Made in Canada" Ford is a necessity—not a luxury.

Touring Car \$590; Town Car prices on application. All Ford cars are fully equipped, including electric headlights. No cars sold unequipped. Buyers of Ford cars will share in our profits if we sell 30,000 cars between August 1, 1914, and August 1, 1915. Write Ford Factory, Ford, Ontario, for catalogue I-1.



When writing advertisers, please mention INDUSTRIAL CANADA.

MR. COPPING LOST ON LUSITANIA.

Mr. George R. Copping, Toronto, a director of the Provincial Paper Mills Co., Limited, was one of those who were lost when the *Lusitania* succumbed to a German torpedo on May 7th. Mrs. Copping went down to death with her husband. The late Mr. Copping took a keen interest not only in industrial matters as they concerned his own affairs, but also in the broader sense as they affected the community as a whole. His loss will be greatly felt by his friends and business associates.

DEATH OF MR. MUNRO.

Canada lost one of her oldest manufacturers in the death of Mr. Robert Munro, which occurred at his home in Montreal in May. He was for many years President of the Canada Paint Company. The deceased came to Canada in 1865 to establish a branch of the Alexander Ferguson Company of Glasgow, lead and color manufacturers. In 1892 he completed an amalgamation of the Canadian branch of the Alexander Ferguson Company, the William Johnson Company of Montreal, and A. G. Peuchen Company, of Toronto, thus forming the Canada Paint Co., Limited. After his retiring from active business the company was acquired by the Sherwin Williams Company.

DEATH OF MR. BEARDMORE.

In the death of Mr. Walter D. Beardmore, of Beardmore & Company, Toronto, Canada lost one of her best known and most widely respected manufacturers. Beardmore & Company and their subsidiary companies have established representatives in the manufacturing of leather which are familiar to business men.

DEATH OF MR. HANNA.

The death of Mr. Charles E. Hanna, of the Dominion Textile Company, Limited, Montreal, was a matter of keen regret to manufacturers and other business men throughout Canada, as the deceased was well and favorably known, not only as a manufacturer, but also as a citizen.

MR. H. OSBORNE.

H. Osborne has been appointed works manager of the Angus shops of the C.P.R. at Montreal. The Angus shops district has been operated as a separate unit, but will henceforth form part of the Eastern lines.

AGENCY FOR SWEDEN.

Swedish business man with good connections, ten years' experience in Canada, who will in the near future establish office in Stockholm, Sweden, wants sole agencies for Sweden, eventually Russia, for Canadian goods. Box 17, INDUSTRIAL CANADA.



Framework of Incinerator erected for City of Berlin, Ont.,
by the Metal Shingle & Siding Company, Limited

Steel Construction

MANUFACTURING buildings, warehouses, sheds in any size and style can be furnished complete and ready to erect, or if required, we undertake the entire construction. Rigid steel framework such as we supply and heavy Acorn Corrugated Iron form the most economical buildings where protection from fire and durability are essential.

Among the buildings constructed by us are the Incinerator shown in the cut, a steel garage 35 x 70 for Godwin Bros., Niagara Falls, and a boat-house 44 x 116 for Richardson & Son, Kingston.

Correspondence is invited with manufacturers who need buildings of this nature

Associated with A. B. ORMSBY & CO., Ltd.

Consolidated Factories at :

Montreal Toronto Preston Winnipeg
Saskatoon Calgary Regina

The Metal Shingle & Siding Company, Limited

PRESTON, ONT.

Your Boiler Room

is where large profits can be made by installing a

Jones Underfeed Stoker

It is a **BIG** paying investment in the **SMALL** plant.

It is a **BIGGER** paying investment in the **LARGER** plant.

Fuel saving from 15% to 25% interests most steam plant owners.

Hundreds of **JONES STOKERS** are to-day making these savings in plants like your own.

Have us report on the cost and merits of equipping your plant. **The JONES STOKER is made in Canada** but used everywhere. It is the simplest stoker built; fewer parts and none moving in contact with the fire; no grates; no losses through grate bars; no smoke.

May we send you descriptive booklet?



JONES UNDERFEED STOKER COMPANY, LTD.

NATIONAL TRUST BUILDING TORONTO



MR. K. J. MORRISON

President of the Manufacturers Association of British Columbia

LOST ON THE LUSITANIA.

Kenneth John Morrison, President of the Manufacturers Association of British Columbia, was a Nova Scotian by birth, and in his fifty-second year. He came to Vancouver eight years ago to take over the management of the B.C. Wire and Nail Company, which he subsequently reorganized as the Morrison Steel and Wire Company, Limited, of which he was President.

His name may truly be added to the "Roll of Honour," for the object of his mission was as truly patriotic as those who fall fighting in the field—he was proceeding to England, at his own expense, to assist in preparing the way for the placing of contracts for British Government requirements which would cause the flag of commerce to fly with greater strength in the province to whose commercial and industrial advancement he had so earnestly devoted his energies.

As President of the Morrison Steel and Wire Company, Mr Morrison exhibited a capacity for hard work, in the face of difficulties which would have deterred most men, and built up a successful enterprise, employing some 150 men. Before coming west he was connected with the Dominion Iron and Steel Company in Nova Scotia, and with Milliken Bros., Staten Island, New York.

In spite of his lifelong connection with the iron trade, he was the last man of whom it could be said "the iron has entered his soul," for he was always ready with a helping hand and a smile for any person or project working for the public good.

In Mr. Morrison Canada loses one of her finest type of citizen, and his loss to British Columbia, and to Vancouver especially, is keenly felt by everyone with whom he came in contact, and their name is legion, for his activity was great.

The sense of loss is accentuated by the manner of his going!

He leaves a wife and three children, one son now serving in France with the Canadian Expeditionary Force.

J. H. H.

FIGHTING THE OPEN SHOP.

How Duluth Citizens Freed Themselves from the Tyranny of Labor Unions.

(From the National Open Shop Publicity Bureau, New York.)

If the question of the open and closed shop has arisen in your business or your city in a practical way, the following story of the city of Duluth, Minn., will be interesting. Previous to the events herein narrated, Duluth had been a strong union town for many years. The building industry was absolutely upon a closed shop basis, and strong unions existed in manufacturing and other trades. The scale of wages in the building trades was as high as that paid in New York City. Practically every skilled mechanic belonged to the union, and not only were non-union men thus kept from the city, but the unions of the city went so far as to discourage the coming in of even union men from outside cities. Thus securing arbitrary control of the labor supply, the unions were enabled not only to obtain the highest of wages, but to subject the building industry of the city to every conceivable form of union control, restriction and limitation.

Decrease in Building Operations.

Under these conditions, although Duluth is strategically located in a position where there is every incentive for rapid growth, building operations had been for some time on the decline, and this, too, at a time when the wave of prosperity was still at its height. The question had become one of serious concern to the business men, and especially the real estate interests in the city, and some remedy for Duluth's apparently sick industrial condition was being sought.

Arbitrary and Unjust Attack on Local Contractor.

About this time one of the largest of the local general contractors secured the contract for the erection of a large business block in Duluth. The contract for the steel was let separately and to a large company whose operations were national in scope and which had for some time been doing its work upon an open shop basis. When the open shop workmen of this company started the erection of steel, the closed shop workmen of the general contractor went on strike to compel their discharge. The general contractor explained that he had no control over the steel contract, but this made no difference. He then offered the steel erecting company the entire price of its contract if it would get off the work, he himself intending to erect the steel. This the steel contractor refused to do, and proceeded with its open shop work. Thereupon, and although the general contractor was absolutely helpless, the building trades unions of Duluth called a general strike, not only on the one job, but on all the other operations of this contractor in the city. Had he been left alone at this crisis, his absolute ruin would have been inevitable. His friendship for union labor and the long years during which he had conducted his work under agreements with it had secured him no consideration or immunity from unjust attack, but had only resulted in placing him in a position of greater vulnerability.

Uprising of Business Men—Declaration for Open Shop.

The general contractor, however, was not left to fight his battle alone. The other contractors immediately saw that if he were defeated on such an issue, they themselves would only be in a worse plight and no one would be safe from a repetition of a similar outrage. The Builders' Exchange, therefore, declared for the open shop and pledged its support to the general contractor. So thoroughly was the business com-

(Continued on page 162)

ROYAL COMMISSION WORK DEFERRED.

The Dominion Royal Trade Commission will probably not resume work in the immediate future, owing to the fact that Lord d'Abernon, its chairman has just been appointed chairman of the new central control board for the liquor traffic in munition and camp areas.

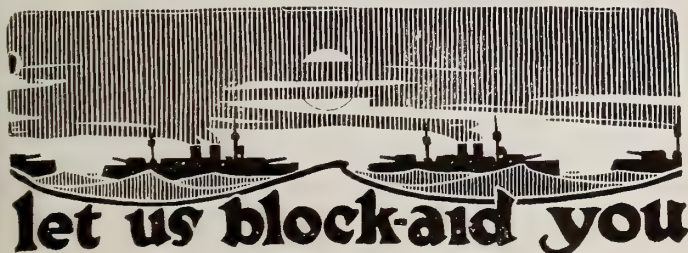
GOVERNMENT KEEPING PUBLIC WORK GOING.

The Dominion Government will continue the construction of all public works under contract in Canada. The total expenditure of the Dominion for the year, apart from the war, will reach \$200,000,000, while the war expenditure will add \$100,000,000.

In addition to outlays in other departments, the Government programme for the current year includes expenditure upon public works of over \$25,000,000, on railways and canals of \$27,000,000, on capital account alone and on works of Harbor Commissioners of over \$3,500,000.

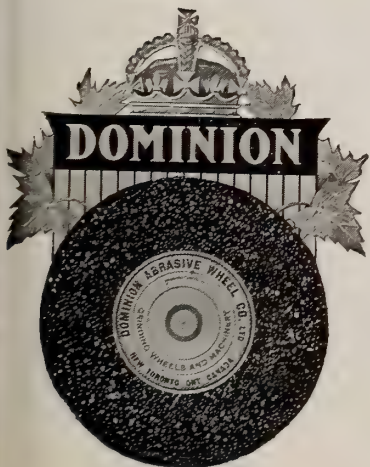
Since the outbreak of the war the Dominion has sought to minimize unemployment in Canada by maintaining its programme of public works, including the I.C.R. terminals at Halifax, Welland Canals, Quebec bridge, N.T.R. and Hudson Bay Railroads, terminal elevators and harbors at Halifax, St. John, Quebec, Montreal, Toronto, Hamilton, Port Arthur, Fort William, Vancouver and Victoria.

W. Hoult succeeds Mr. C. A. Ablett, General Manager of the Siemens Company of Canada, Limited, Montreal, who has resigned and has sailed for England to obtain a commission in an English regiment.



WE can give you most efficient aid in making your advertising blocks and electros. Our plant is splendidly equipped, and our operatives are all skilled men. No order is too large for us to turn out quickly—and well. We have the facilities and system for taking care of your original plates here and shipping electros, stereotypes or mats to proper destination on your order. Write us—we can improve your cut service and save you money. All orders filled on the same day in which they are received.

RAPID ELECTROTYPE COMPANY OF CANADA
347 Craig Street West MONTREAL



\$141,017.00 worth of abrasive wheels imported into this country in the last fiscal year, that should have been "MADE IN CANADA."

We can furnish the Canadian made goods of the best natural and artificial abrasives, by the vitrified or silicate process; in the latter, with or without the wire web.

Can be obtained from the following supply houses:

J. R. BAXTER & CO., LTD.
Montreal

H. W. PETRIE LTD.
Toronto

McDOUGALS LTD.
Ottawa

COWAN HARDWARE CO.
London

WALKERVILLE HDW. CO.
Walkerville

NORTHERN CAN. SUP. CO.
Cobalt

Or direct from the manufacturers,

DOMINION ABRASIVE WHEEL CO., LTD.
NEW TORONTO, ONT. CANADA

"Metallic" Building Materials

USE BRITISH GOODS— SUPPORT THE EMPIRE

Every foreigner who sells you goods that you could buy in the Empire is taking just that much money away to build up foreign industries and keep foreign workmen employed.

Keep the money at home where it will circulate back to you. Especially when you can get equal or better values at home. The "Metallic" line of building materials is British-made through and through.

The "Metallic" line includes: "Empire" Corrugated Iron; "Eastlake" Steel Shingles; Steel Siding, Ceiling and Wall Plates; "Hayes" Patent Lath; Skylights; Ventilators; Galvanized or Copper Cornices; Fire-proof Doors and Windows; Well Curbing; Culverts; Conductor Pipe and Eave-troughs.

Write to-day for illustrated catalogues and price lists. N.B.—No "Keystone" or other foreign-made sheets used.

METALLIC ROOFING COMPANY, LIMITED
Manufacturers TORONTO and WINNIPEG



TO MANUFACTURERS

The advertiser is open to represent one or more Canadian Manufacturers in the City of Hamilton and adjacent territory. Has large business acquaintance and excellent references. Correspondence invited. Confidential. Address

MANUFACTURERS' AGENT - P.O. BOX 65, HAMILTON, ONT.

DENNISTEEL
LONDON - CANADA

THE BEST STEEL LOCKERS MADE IN CANADA

MADE BY
THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON, CANADA

An Effort Which Benefits the Whole Will Benefit the Individual

When the "Made-in-Canada" movement was first initiated there was some debate as to its possible benefit. Now no one even suggests that the "Made-in-Canada" Advertising Campaign was other than of the greatest possible benefit to Canadian Manufacturers and Canadian Trade generally at a most trying time.

The individual Manufacturer has benefited from the effort of the Canadian Manufacturers as a whole, and will continue to benefit from its continuance, but to take full advantage of the "Made-in-Canada" sentiment you must advertise individually, tell people about your goods, and tie up your advertising to the "Made-in-Canada" sentiment.

Advertising at any time is a potent sales force, but present conditions offer unusual opportunities that many Canadian Manufacturers are taking advantage of.

Our organization successfully handled the "Made-in-Canada" Campaign. We are equally well fitted to advise you how to make your work most effective.

Address nearest office.

A. McKIM LIMITED ADVERTISING AGENCY

MONTREAL
Lake of the Woods Building

TORONTO
103 Bay St.

WINNIPEG
Union Bank Building

LONDON, ENG.
4 and 5 Norfolk St., W.C.

FIGHTING THE OPEN SHOP.

(Continued from page 160.)

munity aroused and so clear had it become that the domination of the closed shop union was one of the forces impeding the progress of the city, that the Real Estate Board, the Commercial Club, the Architects Association, and finally an open mass meeting of Duluth's citizens all declared for the open shop and formed a general Citizens' Association for the purpose of putting it into operation. And right here it may be pertinent to say that such a general and wide-spread condemnation of an institution and such an uprising on the part of the community to root it out, is proof in itself that there is something rotten in that institution. The closed shop had had a good many years to make a record in Duluth. Had it been a public benefit, a factor in upbuilding the city and adding to its prosperity, it would have been gladly accepted as a permanent fixture.

Results.

The results of the general open shop uprising were in some respects surprising even to its supporters. At first many outside men were brought into the city, but it soon developed that a large percentage of the rank and file of the unions themselves were out of sympathy with the policy of their leaders, and these men returned to work at the first opportunity. So thorough and revolutionary was the change, that scarcely none of the features of a long drawn out strike were experienced. With the whole community of one mind, there was no encouragement or tolerance for any of the ordinary closed shop methods, such as violence, the boycott, or intimidation.

TO MANUFACTURE BRASS IN B.C.

Officials who were sent to British Columbia to investigate the proposed manufacture of brass in Canada through the refining of both copper and zinc in this country, have reported that it is quite feasible, and should be a profitable industry, if aided at first by a small Government bonus. Brass is very necessary at present for the manufacture of munitions of war, and it is stated that the price could be lowered if it were manufactured in Canada. Britain would purchase part of the output. It is claimed that a saving of two cents a pound on copper for two years, with a demand like that existing at present, would pay the cost of establishing a refinery.—*Contract Record*.

HE'S SURELY ROBBED THE PEEFUL AND HE OUGHT TO BE IN JAIL.

If you build a line of railway over hills and barren lands, giving lucrative employment to about a million hands; if you cause a score of cities by your right of way to rise, where there formerly was nothing but some rattlesnakes and flies; if when bringing kale to others you acquire a little kale, then you've surely robbed the peepul, and you ought to be in jail. If by planning and by toiling you have won some wealth and fame, it will make no odds how squarely you have played your little game; your success is proof sufficient that you are a public foe, you're a soulless malefactor, to the dump you ought to go; it's a crime for you to prosper where so many others fail; you have surely robbed the peepul and you ought to be in jail. Be a chronic politician, deal in superheated air; roast the banks and money barons—there is always safety there; but to sound the note of business is a crime so mean and base that the fellow guilty of it ought to go and hide his face; change the builder's song triumphant for a politician's wail, or we'll think you've robbed the peepul, and we'll pack you off to jail.—*Selected*.

*For Your Fall Catalogue
Have the Printer Submit*

NATIONAL PERFECTION BOOK

A strictly high-class coated paper which will add life to your illustrations. A "Made-in-Canada" paper which is the equal to any imported sheet.

NATIONAL PAPER COMPANY, LTD.

206 Read Bldg., MONTREAL, QUE.

Mills at VALLEYFIELD, QUE.

156-160 John St., TORONTO, ONT.

also

NATIONAL STANDARD BOOK

NATIONAL SPECIAL BOOK

CHIEF OFFICE FOR CANADA, TORONTO



ALFRED WRIGHT, Manager, 8 Richmond St. E.



**POWER PRESSES
DROP AND SCREW**

SHEET METAL
STAMPINGS
DIES AND TOOLS

W. H. Banfield & Sons

120 Adelaide W. - Toronto

**ARMSTRONG WHITWORTH OF CANADA
— LIMITED —**

MANUFACTURERS OF CELEBRATED BRANDS OF
HIGH SPEED STEEL & DRILLS

"AW" FOR CUTTING ALL METALS
— AT HIGH SPEEDS

FOR HARD METALS — **"TYR"**
RAILWAY & TRAM TYRES

OFFICE 22 VICTORIA SQ. MONTREAL

— WORKS LONGUEUIL QUE.

OCEAN TONNAGE DECREASE.

The scarcity of ocean tonnage continues to constitute the chief obstacle to the carrying on of the external commerce of the Dominion. A statement has been prepared by the Government showing to what extent the tonnage has declined chiefly as a result of the withdrawal of so many ships for Admiralty purposes, as well as from other causes arising from the war. The figures are for April, and in each case the register tonnage is given. For Victoria, B.C., the figures are 152,373, as compared with 196,987; Vancouver, 140,600 against 212,920; Montreal, 2,734 against 35,958; Quebec, nil against 40,232; St. John, 131,853 against 108,983, and Halifax, 125,000 against 223,052.

THE PASSING OF A TYPE.

Handling men, as opposed to driving them, is rapidly replacing the old-fashioned method of doing work. The bullying, blustering, foul-mouthed walking boss of but a few years ago is rapidly disappearing from construction work, and the quiet-spoken, tactful superintendent, quite frequently an engineer, is taking his place. The change marks the passing of a type, says *The Engineering Record*. The laborer of to-day is a different kind of man from the laborer of ten years ago; the increasing proportion of plant and mechanical equipment

on construction work has brought about the change. The proportion of skilled workmen to the kind whose intelligence is equal only to the wielding of a pick and shovel and the use of a wheelbarrow has been greatly increased. The old type of workman expected brow-beating and even brutality. But the new type resents it, even to the point of refusing to work. The thinking contractor realizes the change that has taken place and adapts his methods to suit. His aim is to get the maximum output from each man, and to accomplish it, he devotes his efforts toward developing a spirit of co-operation, of enthusiasm and of interest in the work.

QUEBEC BRANCH ANNUAL MEETING.

The annual meeting of the Quebec Branch of the C.M.A. was held on May 28th, Mr. J. H. Gignac presiding.

The Chairman submitted an interesting report covering the year's activities after which there was an animated discussion on war contracts and export trade.

The officers for the coming year were elected as follows:—

Chairman—J. H. Gignac, J. H. Gignac, Limited.

Vice-Chairman—Paul Hébert, St. Lawrence Glove Works.

Executive Committee—J. H. Fortier, A. Belanger, Limited, Montmagny; L. Letourneau, M.L.A., Quebec Preserving Co., Quebec; Chas. A. Paquet, General Car & Machinery Works, Montmagny.

The resignation of Mr. Georges Morisset, who has held the post of Secretary for the past two years very acceptably, was received with regret, and Mr. P. A. Galarneau was appointed in his stead.

IS AN APARTMENT HOUSE A FACTORY?

The following decision under the Workmen's Compensation Act was made by the Supreme Court of Saskatchewan recently, by Mr. Justice Newlands. The late Mr. J. Stoddard tried to raise the elevator in the Willoughby and Duncan apartment block, at Regina, while standing on the floor outside, and, being caught between the elevator and the floor above, was killed. His executors brought suit for damages, but Judge Hannon ruled that the building was not a factory, and was, therefore, not covered by the Act. On appeal to the Supreme Court, however, Judge Newlands decided "that it was the intention of the Act that every building in which machinery is used is a factory under the Act," and ordered compensation to be made.

The definition of a factory which was evidently in the mind of the judge was taken from the Workmen's Compensation Act rather than from the Factory Act, and it was evidently considered that the employees of a large apartment block, which often has its own electricians, engineers, and other mechanics should be entitled to the same protection as the employees of any plant actually engaged in manufacturing processes.

A. M. Wickens, recently on the staff of the Canadian Casualty & Boiler Insurance Co., Continental Life Building, Toronto, is now Ontario representative of the Dearborn Chemical Co., of Canada, the offices and factory of which are located at 1220 Dundas Street, Toronto.

The Brantford Computing Scale Co., Ltd., Brantford, are calling for plumbing, heating and electrical tenders for their new factory.

\$80.00



\$60.00

“Made-in-Canada”

CHALLENGES
THE WORLD

The “Empire” Typewriter

Appeals for no more than comparison with any typewriter—at any price. If the value is proved—buy the only machine made in Canada. Get the facts about what “Empire Service” means.

THE WILLIAMS MFG. CO., Limited
MONTREAL SINCE 1853

When Wanting
JUTE AND COTTON BAGS

Of Any Description
Think of the

Smart-Woods, Limited

HEADQUARTERS FOR

**TENTS, Awnings, Flags
TARPAULINS, LUMBERMEN'S and
CONTRACTORS' SUPPLIES
and CLOTHING**



Montreal · Ottawa · Toronto · Winnipeg

THE BRITISH EMPIRE INDUSTRIAL LEAGUE

An Organization which aims at the Expansion and Protection of British Trade. As to Canada
Motto will be "Canadian Goods for Canadian People."

AN organization, called the British Empire Industrial League, now in process of formation, is described in a recent issue of the Trade and Commerce Department Weekly Report, and if the objects set forth in the prospectus are attained, the effect upon British and colonial industry will be far-reaching.

Mr. W. L. Griffith, the Secretary to the High Commissioner for Canada, 17 Victoria Street, London, W.C., has forwarded to the Department the copy of a communication from Mr. George Hughes, Secretary to the British Empire Industrial League, 14-15 Southampton Buildings, Holborn, London, W.C. A desire is expressed to secure quotations from Canadian manufacturers of cloth and other army supplies for shipment to the continent of Europe, and a list of some of the requirements is enclosed. Samples, stocks, lowest net prices, and quantities for present and future supplies should be given when submitting quotations. The following is the list of the requirements mentioned:—

and encourage industrial and commercial co-operation within the empire.

3. "To advocate the prior right of British labor to employment throughout the empire.

General Programme.

"The British Empire Industrial League is entirely non-political. Its operations on behalf of British industry, manufacturers and merchants are world-wide. Their tendency and effect are such as to develop and consolidate trade between Britain and her overseas dominions, and to constantly increase the volume of commerce flowing to the British Isles and other parts of the empire.

"The Leagues personnel and advisers are men of high attainments, and embrace experts in almost every branch of industry and trade. Its general system and machinery are comprehensive and effective for the purpose of rendering fruit-

Description.	Army Supplies Required. Quantity.	Remarks.
Blue Grey Army Cloth	2 million yards	32 inches wide, 26 ounces weight, 15 threads wrap and weft per square centimetre. Cash against shipping documents.
White and Tan Haversack Cloth	160,000 yards	Any width, prices from 7d. upwards, not to exceed 1s. 2d. yd. Cash against B.L.
Canvas buckets, entrenching tools, spades, shovels.	Large lots	Quote close prices for large lots. Cash against B.L.
Blankets and sheets	"	" " " "
Burial sheets	2,000 yards	
Khaki cloth, either English shade, Khaki or French blue gray	160,000 yards	54 inches 18/19 ozs. all wool. Cash against B.L.
Cabardine cloth, navy or black	300 pieces	May, July delivery, cash against B.L.
Ladies' costumes, cloths, serges, chevots, plaids, checks, tweeds, etc.	2 to 300 pieces of each	" " " "
Leather, sole or harness, &c.	20 ton lots	Immediate cash against documents.

In all cases where large orders are concerned bankers' guarantee in London will be given if required. Stock available and maximum deliveries per week, dating from receipt of order should always be indicated.

Organization of the League.

With reference to the organization of the British Empire Industrial League, it may be said that the president is His Grace the Duke of Sutherland and that the list of vice-presidents and council is made up for the most part of men of high rank and undoubted standing. The purposes and policy of the League may best be indicated by the following extracts from a prospectus being circulated by its members:—

Objects.

1. "The expansion and protection of British trade throughout the world.

2. "To educate British subjects to support the agricultural and manufacturing industries of the empire by inducing them to always ask for—and, other things being equal—to purchase British-made goods and colonial produce; to foster

ful service to the imperially important interests for whose promotion and protection the organization exists.

"Both within the empire and in foreign countries the work of the League during the last year—and especially since the beginning of the war—has been carried on with increased vigor, and with more than satisfactory results. This has been very generously recognized by the press and many leaders of industry at home and in all our dominions.

The Campaign in Canada.

"The principal object of its operations in Canada is to help in introducing new industries and in developing existing ones in such a way that the country may soon become practically independent of imports; and that, in any event, there may be enough industrial occupation in the country to absorb the surplus labor annually thrown on the market on the completion of harvesting. Anything that helps towards the solution of this difficult problem should command the cordial support of every Canadian.

"The British Empire Industrial League's operations will, in this respect, contribute largely in supplying the required remedy. The League, by its propaganda and organizing work,

—yes, time is money —how much money are your employees wasting?

PRICES :
DIAL CLOCKS
\$85 and up.
CARD CLOCKS
\$95 and up,
according to style
and size.

There is a way to stop the waste. The firms named below and thousands more have found it. Does their judgment mean anything to you? They are successful people. They use International Time Recording Co. Systems, and only did so after full investigation of other systems. Think that over!

Dominion Government
Consumers Gas Co.
T. Eaton Co.
Robert Simpson Co.
Massey-Harris Co.
R. G. Dun Co.
Dominion Radiator Co.
Fairbanks-Morse Co.
E. W. Gillette Co.
Gutta Percha Manufacturing Co.
Heintzman & Co.
Laidlaw Lumber Co.
Lowndes & Co.
McLaughlin Carriage Co.
Wm. Neilson Co.
Jas. Robertson Co.

Toronto Street Railway Co.
Toronto Type Foundry Co.
Canadian Kodak Co.
Beardmore & Co.
Dodge Mfg. Co.
J. W. T. Fairweather
A. McKim & Co.
H. Gagnier Limited
National Club
Ontario Club
A. B. Ormsby Co.
Ontario Wind Engine Co.
Packard Motor Car Co.
Dominion Automobile Co.
Canadian Westinghouse
Steel Company of Canada
Otis Fenson Elevator Co.

B. Greening Wire Fence Co.
National Steel Car Co.
Ford Motor Car Co.
Reo Motor Company
Studebaker Corporation
E.M.F. Co.
Gramm Motor Car Co.
Canadian Carriage Co.
J. R. Booth Co.
American Bank Note Co.
Chateau Laurier
Hotel Windsor (Montreal)
Quebec & Southern Railways
Standard Silver Co.
Toronto Civic Railway
Verity Plow Co.
Sawyer Massey

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BRITISH EMPIRE INDUSTRIAL LEAGUE.

(Continued from page 166.)

will form, educate, and direct public opinion on the matter of co-operation in the development of home productions. The greater number of leaguers, therefore, the greater will be its influence and the sooner will be realized its motto in Canada, viz., 'Canadian goods for Canadian people.'

"The League will pay particular attention to the starting of works throughout the Dominion, to carry on the manufacture of those goods which at present are almost entirely, or largely, imported. The chief aim of the League in the Dominion is to make Canada industrially independent as soon as possible. Her natural resources are so great and varied that, excepting certain luxuries, she only needs capital and energy to enable her to produce all her requirements. To cause this capital to flow to Canada for the erection of factories and starting of enterprises, to exploit and develop her resources and industries, and thus aid in supplying employment and contentment to her people, the best thought and effort of the League will be exercised.

"The fundamental principles of the League are:—

"1. The expansion and protection of Canadian industry and trade.

"2. The co-ordination and harmonizing of the industrial forces of the Dominion.

"3. The promotion of an active fraternal and co-operative spirit between Canada and her sister dominions and colonies and the empire.

"4. To co-operate, financially or otherwise, with other associations, or in movements whose objects tend to promote the national or imperial weal, or which may be working in the cause of humanity."



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TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

625. **South America.**—Canadian Specialist in electrical goods with ten years' acquaintanceship in South American countries with good command of Spanish would like to communicate with parties who are exporting to South America or who are considering doing so.

626. **Butter Boxes.**—A French firm of commission and manufacturers' agents in Buenos Ayres would like to hear from manufacturers of butter boxes. These should be made of spruce or other non-odorous wood.

627. **Small Threshing Machine, Oil Engine, Machine Excavator.**—A firm of engineers and importing merchants in Buenos Ayres desire to import from Canada the following: Small threshing machine, oil engine and machine excavator.

628. **Threshing Machine.**—A South American firm desires to hear from Canadian manufacturers of threshing machines.

629. **Cordage and Binder Twine, Handles, Nails, etc., etc.**—An old-established British firm in Buenos Ayres wishes to communicate with Canadian manufacturers of the following: cordage and binder twine, portable forges, drop forgings, grind stones (corundum), handles, nails, nuts, screws and bolts, oil cups, paints, pipes, cast and wrought iron, tools, axes hammers, files, saws, etc., valves (various), wheelbarrows, wire and iron cable.

630. **Amber Mica.**—A Manchester firm is open to receive offers from Canadian producers of thumb-trimmed amber mica.

631. **Three-ply Wood, etc.**—A London firm of merchants who handle wooden and turned goods of all kinds invite offers from Canadian manufacturers. They particularly seek supplies of three-ply wood.

632. **Railway Ties.**—A Parisian firm is in the market for railway ties (oak or cedar preferred) and invites quotations for large quantities from Canadian mills and exporters.

633. **Food products.**—A firm in Paris is desirous to buy or sell on commission Canadian food products and is anxious to receive offers and quotations from Canadian manufacturers and exporters.

634. **Food Products and Manufactured Articles.**—A firm in Central France is willing to buy Canadian goods and invites correspondence from Canadian manufacturers and exporters.

635. **Plywood.**—A Glasgow House interested in plywood would be glad to know what Canada can offer in variety of sizes.

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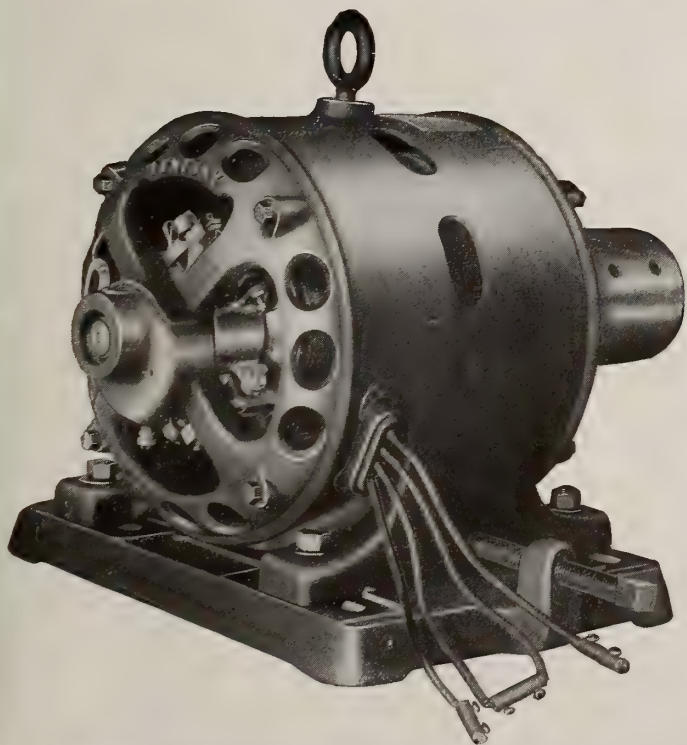
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636. **Washboards, Clothes-pegs, Wire, etc.**—A firm in Glasgow is desirous of being put in touch with Canadian firms in a position to supply washboards, clothes-pegs, household articles, horse-shoe nails, wire, wire fencing, and barbed wire.
637. **Australian Agency.**—An old established firm of Canadian manufacturers agents in Australia is desirous of securing for Australasia, upon a commission basis, of the following lines: Steel porcelain enamelled baths and sinks, light blue inside and grey outside, white inside and grey outside, or white inside and blue outside; wrought iron pipes (water and gas) must be supplied with English standard thread, in lack and galvanized, uniform gauge throughout; wrought steel hollow-ware; electric fans, radiators, irons and other kindred lines.

638. **Hard Maple Flooring, Closet Seats.**—A firm in Buenos Ayres would like to correspond with Canadian manufacturers of the above.

639. **Khaki Cloth.**—A Newfoundland firm asks for names of Canadian manufacturers.

640. **Sewer Pipes.**—Canadian manufacturers of earthenware sewer pipes should communicate at once with a Newfoundland official.

641. **Duck, Rope.**—A Cape Town firm, manufacturers of sails and tents, requests samples and quotations on cotton canvas and cotton ducks, all widths from 18 inches to 72 inches, weights from 8 ounces to 15 ounces. They also desire samples and prices on ropes for all purposes, tarred, oiled and plain.

642. **Duck.**—A firm of general dealers and Government contractors in Cape Town requests samples and prices of cotton duck eighteen inches to seventy-two inches wide and from eight ounces to sixteen ounces weight.

643. **Steel, Iron Bars, etc., Copper, Nickel, Lead Ores.**—A French firm is anxious to hear from Canadian producers.

644. **Steel, Iron Bars, Flats, Square, Round, etc.**—A French firm of dealers in metals is anxious to receive offers from Canadian mills.

645. **Paper for Newspapers.**—A wholesale paper merchant in France is willing to purchase the above in Canada and is asking for samples and quotations for large quantities.

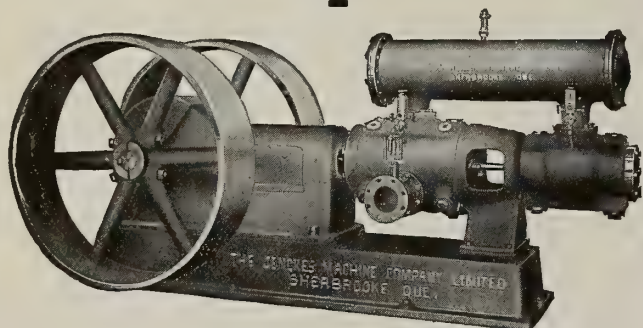
646. **Asbestos Slates and Sheets.**—A Birmingham firm enquires for Canadian manufacturers of asbestos slates and sheets for electric insulating linings; size of sheets to be 96 inch x 48 inch, 3-8 inch thick.

647. **Wood Paving Blocks.**—A Birmingham City Official is open to receive quotations and samples of above, suitable for street paving in deal, 9 inch x 5 inch x 3 inch, invites offers from Canadian purchasers.

648. **Raw Linseed Oil.**—A London firm who are large buyers of raw linseed oil invites offers from Canada producers.

649. **Railway Sleepers.**—A Glasgow firm desires the addresses of Canadian manufacturers of railway sleepers.

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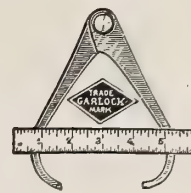


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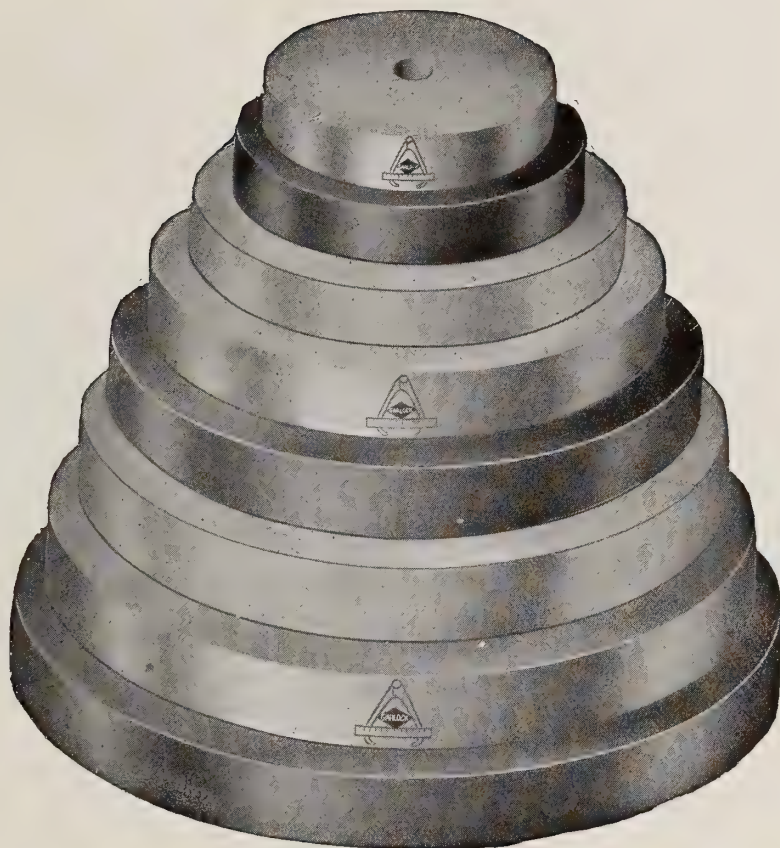
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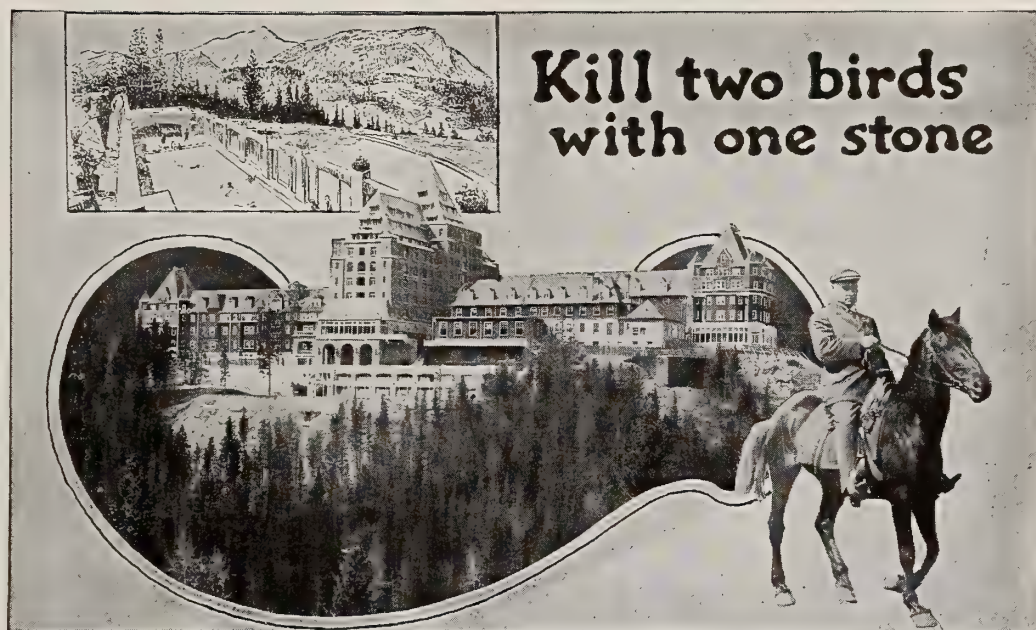
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Marine Insurance effected at rates equal to those given from New York.

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650. **Ladies' Wearing Apparel.**—A London manufacturers' agent stated to have a connection with large retail stores in England is prepared to undertake the representation of Canadian manufacturers of ladies' wearing apparel wishing to open up business in Great Britain.
651. **Box Shooks.**—A firm in Cape Town asks for quotations on 100,000 sets of box shooks.
652. **Scrap Metals.**—A London firm of metal refiners and smelters are prepared to receive offers of good class scrap metals, from Canadian shippers.
653. **Carriage Builders' Supplies.**—A Newfoundland wholesale jobber desires to represent Canadian manufacturers of carriage builders' supplies.
654. **Lamp Chimneys.**—A Scottish firms asks for names of Canadian manufacturers of paraffin lamp chimneys, shades, and globes; incandescent lamp chimneys, shades and globes. brushes for domestic use, and general household hardware.
655. **Steel and Pig Iron.**—A Birmingham firm inquires for 5,000 tons of steel as per following specifications: Sheet bars, 7 inches, 8 inches or 9 inches wide by 10 pounds to 24 pounds per foot. Billets, 2 inches to 4 inches square, rising by one-quarter inch; 2 inches to 3 inches square in 16 to 18-foot lengths; 4 inches square, 2 foot 6 inches to 3 foot 6 inches lengths. Open hearth basic steel, approximate analysis as follows: carbon, 0.8 to 12 per cent.; phosphorus, 0.05 (not over); sulphur, 0.05 (not over); manganese, 0.50 to 0.60 per cent. Billets for rolling into strip, and sheet bars for rolling into sheets. Prices should be ex-ships tackle, Manchester or Newport. Cabled quotations would be appreciated stating also earliest delivery. The same firm inquires for basic pig iron.
656. **Pails and Buckets, Barb Wire, Wire Nails, Cement, Explosives, etc.**—A Glasgow exporting house with extensive trade abroad desires to make arrangements with Canadian manufacturers for purchasing the following: enamelled pails with covers; galvanized buckets; galvanized barb wire; wire nails, cement, explosives, spades, steel tools, and safes.
657. **Steel.**—A Firm in Birmingham is open to purchase steel, sizes ¼-inch to 3-inches round, ¼-inch to 3 inches square, and 1 inch by ¼-inch flat, up to 8 inches by ½-inch.
658. **Spikes, Bolts and Nuts.**—A South African agent is prepared to take up agency for South Africa in railway dogspikes, also cart and carriage bolts and nuts. Immediate correspondence is requested.
659. **Sewing Machines and Accessories.**—An agent in central France wishes to get in touch with manufacturers of cycles, sewing machines, needles, sewing machine thread, cotton, knitting wool.
660. **Brass, Mild Steel Wires, Galvanized Roofing Plate.**—A Paris dealer is in the market for the above—brass in bars.
661. **Enamelled Cast-Iron Baths.**—A dealer in Paris invites quotations on above with catalogues.



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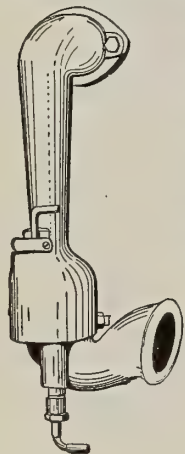
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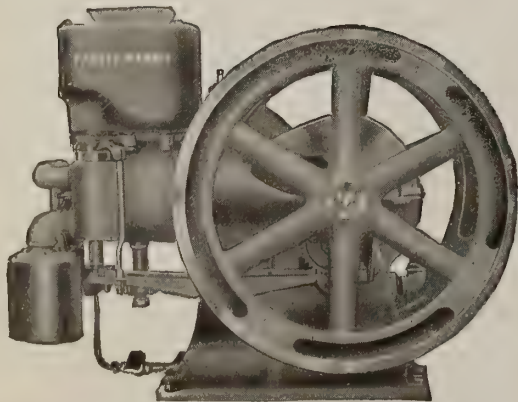
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662. **Spruce.**—A freight car construction department of an important French railroad is in the market for 180,000 cubic feet of spruce or other white lumber similar to Baltic whitewood. Samples one yard long to be sent, dimensions 3 by about 9 inches, delivery company's cars, Boulogne.

663. **Hickory.**—A Scotch company manufacturing golf clubs desires the addresses of Canadian shippers of hickory.

MR. BAIRD WITH CANADA MACHINERY COMPANY.

Mr. Alex. Baird, who, for many years, was Superintendent of the Cowan & Company, Limited, of Galt, has accepted a position with the Canada Machinery Corporation, Ltd., as Superintendent of their Hespeler factory. The Company will resume operations in this plant at an early date.

CORRECT CLASSIFICATION OF ACCIDENTS.

A study of numerous accidents attributed to specific causes has brought out the question as to whether or not the causes assigned are the proper ones. We note, for instance, that a great number of accidents reported as having occurred on machines or appliances, if studied in detail, are found to have been superinduced by other causes, the removal of which would in many cases have prevented the accidents even though the direct machine causes were present. This applies particularly to slipping hazards and bad light.

This is not an argument that the direct machine hazard should not be eliminated promptly and properly in every shop, but is designed to emphasize that it is as essential that the floors surrounding the machinery be kept in such condition that the workman under all conditions may have the greatest opportunity to retain his equilibrium and that it is equally essential that sufficient light be provided to prevent the workman from getting dangerously near the operating parts of the machine, which parts cannot be guarded practically.

As an instance in point, it is noted that an acid accident, as reported in a plant, was classified simply under the heading "Burned by acid," whereas, the real facts in the case were: The man was carrying a pail of acid. He slipped on a greasy floor, spilling the contents of the pail over himself, causing death. It is admitted that the direct cause of accident in this case was acid burning, but the predisposing cause was certainly a slippery floor, and whereas, a suggestion for a safe container of the acid would naturally be in order where such dangerous fluids are handled, still it is just as essential that nonslipping surfaces be provided on the floors where the men are obliged to carry such dangerous fluids.

Another case may be cited—an accident caused through a person slipping while getting on or off an elevator at a floor landing. The accident is usually classified as an elevator accident; "injured getting on or off elevator" is the usual report, where again as a matter of fact the predisposing and inciting cause might have been slippery or poorly lighted landings.

Results in accident prevention are obtained largely in direct ratio to a proper determination of the causes of accidents, which is, therefore, a question that demands the most careful consideration by all safety engineers and statisticians.

—Safety Engineering.

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NOTICE

To Manufacturers, Dealers
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All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, **D. M. MEDCALF,**
Minister of Public Works. Chief Inspector of Steam Boilers.

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Total Assets . . . \$180,000,000

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RAW FUR SKINS REQUIRED IN AUSTRALIA.

An Australian firm who have sold European, Siberian and other furs for a number of years are desirous of obtaining samples and quotations of raw fur skins (undressed and undyed) for the purpose of treating them at their factory in Melbourne. They have accordingly communicated with Mr. D. H. Ross, Canadian Trade Commissioner, in the hope that the matter might thereby be brought to the attention of fur dealers in Canada. The furs of which samples are desired are as follows: Marten, mink, muskrat, silver fox, cross fox, red fox, blue fox, white fox, wolf, wolverine, bear, ermine, skunk, raccoon, squirrel and civet cat.

It is stated that the trade in Australia does not call for the highest priced skins, and that fair and medium qualities would probably be the most suitable.

The consignment of sample skins to the above firm could no doubt be satisfactorily arranged. Canadian fur dealers interested in this inquiry should communicate with the Department of Trade and Commerce, Ottawa, for the name and address of the Australian firm in question and further particulars. (Refer File No. A 832.)

RAILWAY CONSTRUCTION.

Work is Principally Confined to Maintenance and Repairs.

Railway construction continues comparatively quiet. In Winnipeg it was reported that several thousand labourers who usually find employment in railway construction were flocking into the city looking for other work, some of whom were placed on farms and others were being given as much employment as possible by the railways on extra construction and repair work at every possible point. At Edmonton there was no active demand for railway construction, but it was expected considerable work would be done on the main line of the Canada Northern, and also on the Edmonton, Dunvegan and British Columbia Railway. About 800 men were already at work on this railway. On the Canadian Central Railway, grading was under way between McLellan and Peace River, about 400 men being employed, and the road being operated as far as Macleod. On the Alberta and Great Waterways Railway, which branches from the Edmonton, Dunvegan, and British Columbia Railway, about fourteen miles north of Edmonton, it was expected grading would be finished as far north as Fort McMurray this season, about 155 miles remaining to be graded. About 1,500 men were employed on this work. Ballasting operations were commenced on short stretches of the Canadian Northern Pacific line left unballasted between Cisco and Yellowhead Pass last winter, these stretches totalling about 250 miles of unballasted track. A number of stations, water-tanks and sidings were also being constructed. On the Hudson Bay Railway, grading had reached a point 290 miles east of Le Pas, and it was expected about 2,500 men would be employed upon the work later on. At the commencement of operations early in the spring 600 men were employed.

Work in Eastern Canada was confined mostly to maintenance and repairs, and with the advent of fine weather small section gangs were put at work. There was a continuation of construction on the Lake Erie and Northern Railway, with the prospect of larger numbers of men being employed as the season advanced. Extensive repairs were being made to the Newcastle, N.B., station and yard of the Intercolonial Railway in order to accommodate the increased traffic caused by Newcastle having been made the Canada Eastern section of the railway.—*Labour Gazette*.

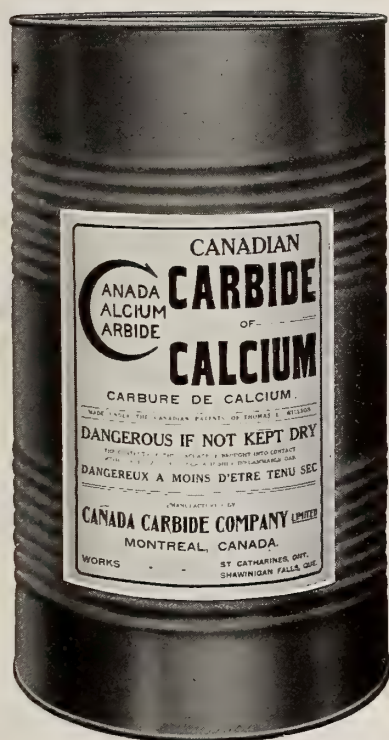
SHIPMENTS FROM BRITISH COLUMBIA INCREASE.

Despite the falling off of the shipments of ore occasioned by the war, the total exports from British Columbia last year as shown in the report of the American Consul-general, just completed, were \$1,865,904 in excess of the previous twelve months. A gain for the Vancouver district of \$5,085,611 is noted, but this is offset by a decrease for the Nelson district of \$3,346,277, mainly due to the curtailment of exports of blister copper and copper matte. More bullion was shipped to the United States from British Columbia in 1914 than in 1913, the gain for the Nelson district being shown at \$180,554.

The total value of declared exports from the consular district over which Mr. Robert E. Mansfield, American consul-general at Vancouver has jurisdiction, to the United States

and possessions for 1914, with the exception of Dawson, which amounts to approximately \$3,000,000 a year, was \$26,293,904, as compared with \$24,428,118 in 1913. The returns from the Yukon have not yet been received at the local consulate. The exports from the Vancouver consular district last year aggregated \$14,393,827, as against \$9,309,216 during the corresponding twelve months of the previous year.

The Whitehorse consular agency shows a decrease for the year of \$111,218. The Prince Rupert office, opened on October 28th, last, handled \$125,565 worth of goods up to the end of the year. An increase in the exports is shown by the consular invoices at the Victoria branch of the service, the returns being \$508,710 in excess of 1913. The Fernie agency shows a decrease of \$431,583.—*Industrial Progress.*



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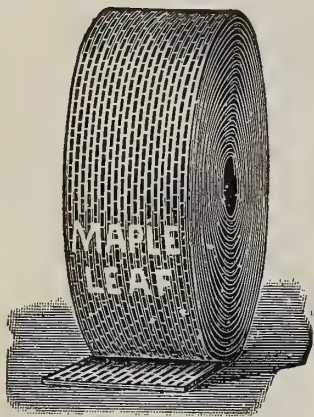
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AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Lethbridge, Alta.

The Ellison Milling Company of this town, has decided to rebuild the elevator at Magrath recently destroyed by fire.

A. Lee has purchased the Taylor elevator at Vulcan and will erect another with a capacity of 30,000 bushels.

BRITISH COLUMBIA.

Anyox, B.C.

The Granby Company has announced its intention to enlarge the smelter at Anyox, operating on ore from the Hidden Creek mine. The new plant will have a capacity of 4,000 tons daily, equal to the capacity of the smelter at Grand Forks, now probably the largest copper smelter in the British Empire. The new plant will be in operation by next fall.

Grand Forks, B.C.

The Granby Company's smelter is again operating at full capacity, about 60,000 pounds of copper being produced per day. The eighth furnace was blown in May 5th, the full battery now being in operation. The Phoenix mines are increasing their output.

Kelowna, B.C.

The building of a hydro-electric plant is now being discussed by the city council and the proposition is to be submitted to the ratepayers in the near future. The estimated cost is \$120,000.

New Denver, B.C.

The test smelter being built at the Standard mine to try the French zinc separation process will be completed by the end of May, and the tests put in operation at once.

Prince Rupert, B.C.

The effect of the new Order-in-Council permitting the landing of fish from foreign bottoms in bond for transit is already shown—three American fishing schooners having landed 100,000 lbs. of halibut for transportation in bond to United States points. It is reported that some sixty American boats will use the port, instead of Seattle, as formerly. The new business is of great importance to the up-building of the terminal of the newly opened transcontinental Grand Trunk line. The drydock and repair plant are rapidly nearing completion.

Revelstoke, B.C.

The Lanark Mining Company will shortly start work on a 7,000-foot tramway. The cost of this equipment will be about \$15,000. It is further planned to install a power plant and erect a new mill on the property.



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Vancouver, B.C.

The Municipal Construction Company has been reorganized as the Vancouver Wood Pipe and Tank Construction Co., Ltd., with the same officers as before. The company specializes in waterworks and irrigation construction, wire wound stave pipe and water tanks.

The lithographic plant previously operated by the Coast Label Company has been acquired by the Alpen-Creech Company, and will be operated under the management of H. M. Alpen, until recently manager of the B. C. Printing and Litho. Co., Ltd.

The Hastings Mill, the pioneer lumber mill of the province, is at present working overtime on several large contracts in hand, including 4,500,000 feet for the Dominion Government dock in Vancouver; 3,000,000 for Prince Rupert, and 10,000,000 for the British Admiralty. A number of other mills through the province are experiencing a considerably better demand than for some time past. The logging industry shows a steady improvement this year over last, the official figure for the first four months of the year showing an increase of 72,000,000 feet scaled this year in excess of last year, equal to sixty per cent. increase.

The engineering shops of Vancouver and Victoria have been busy installing the requisite machinery and tools for handling the order for 50,000 18-pound shells recently placed by the Government. It is expected to start work by June 1, the order to be executed as rapidly as possible.

The petition which has been presented by the coal interests of the province for the imposition of protective duty on the importation of crude oil for fuel purposes, has been modified to meet the objection of manufacturers by the insertion of a clause exempting crude oil imported for manufacturing and refining purposes. The proposal has met with very considerable opposition on the part of the manufacturing and transportation interests and does not meet with very general support. Manufacturers are disinclined to revert to the use of coal after having in self-defence, and at great expense, installed oil burning plants owing to their inability to secure adequate supplies of coal fuel on account of the long drawn-out strikes of the past two years.

The visit to England of Mr. H. R. MacMillan, chief for-ester of British Columbia, who is making a tour to Europe, South Africa and Australia as special lumber trade commissioner for the Dominion Government, has been productive of early results, the first order for ten million feet having just been received by a British Columbia mill for shipment in June. The order is important in that it establishes the direct interest of the British Government in British Columbia lumber, and shipment will be made in vessels under charter to the Admiralty. Further regular orders are expected, limited only by the bottoms available.

Victoria, B.C.

The British Columbia Telephone Company have announced a programme of improvements this year, involving an expenditure of about \$70,000.

Yarrows, Ltd., shipyard at Esquimalt has been very busy of late with repair and overhaul work, mainly on Government vessels.

MANITOBA.

Winnipeg, Man.

A site has been purchased by the Ford Motor Company of Ford, Ontario, on which they will erect an assembling plant and service station to cost \$250,000.



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ONTARIO.

Belleville, Ont.

Material will be purchased locally for work about to start on the erection of a bank building on Front Street for the Dominion Realty Company, 34 King West, Toronto.

Deseronto, Ont.

This town is to have a match factory conducted by the Rathbun Match Company. The capitalization is \$125,000.

Galt, Ont.

A silk factory will be established by P. Fitch and J. McCormack.

Mount Brydges, Ont.

The plant of the Wallace Sawmill Company, which was recently destroyed by fire, will be rebuilt and new machinery purchased.

Port Arthur, Ont.

The National Elevator, owned by the National Elevator Company of Winnipeg, located on the C.N.R. tracks, was completely destroyed by fire on May 2nd.

Port Elgin, Ont.

The Stephens-Hepner Company propose to extend their broom factory.

Preston, Ont.

A by-law was carried to grant aid amounting to \$21,500 to a company which will occupy the Anchor Bedding Company.

Ridgetown, Ont.

The Hydro by-law was carried by a vote of 254 to 38. The by-law to change the present system and instal Hydro was carried by 223 majority.

The flour mill of A. S. Blight has been destroyed by fire. The damage is estimated at \$20,000, about half that amount being covered by insurance.

The mill of the Ridgetown Milling Company, which was recently destroyed by fire, with a loss of \$30,000 will be rebuilt.

Sault Ste. Marie, Ont.

Work has been commenced on the extension to the plant of the Standard Chemical Company and about \$100,000 will be spent on the work.

Toronto, Ont.

Three aviation sheds are under construction. The work is being carried out by the owner, Captain E. L. Janney. The building now being erected is 80 x 50 feet in dimensions, of frame construction, with galvanized iron sides and roof.

Walkerton, Ont.

The business of the Peerless Milling Company, Toronto, has been taken over by W. G. Searle, formerly of the firm of Pletsch & Searle.

Windsor, Ont.

The artificial ice manufacturing plant of the Central Ice Company has been purchased by William J. Pulling, at a cost of \$43,000.

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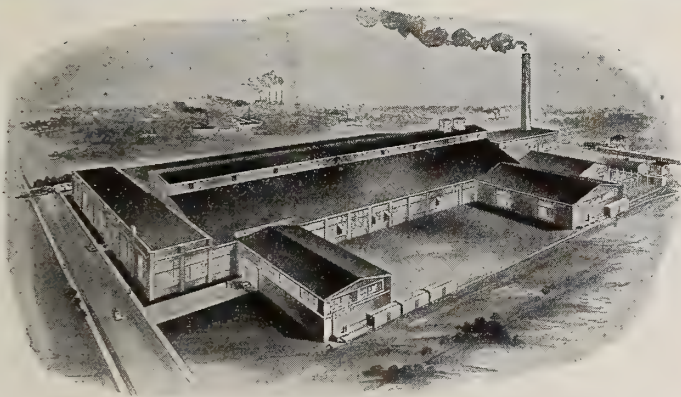
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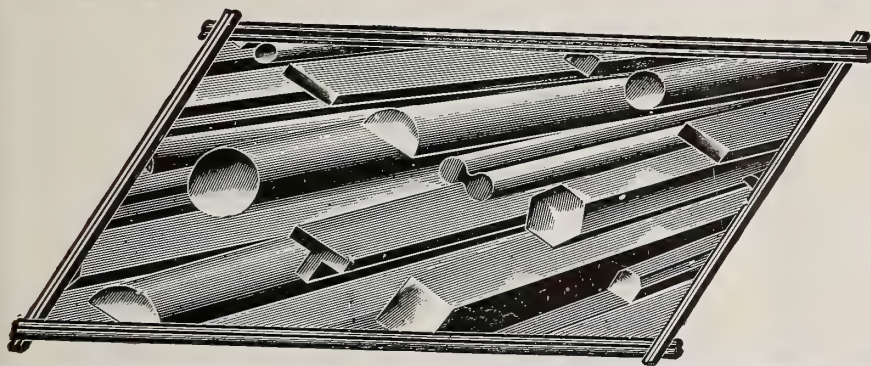
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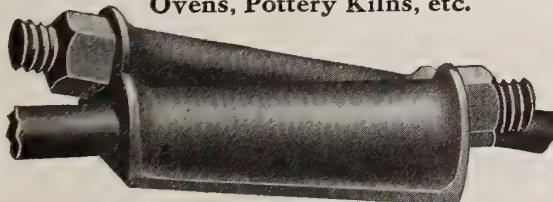
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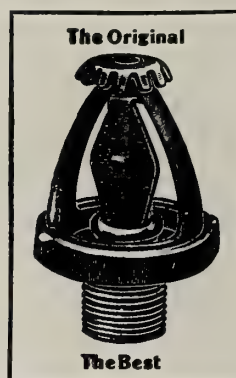
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SASKATCHEWAN.

Moose Jaw, Sask.

The Flour Mills and Packing House are running full capacity and are each employing about 135 men. Wholesale conditions are fair and the wholesalers report that collections are fairly good. The retailers are buying conservatively and report conditions good with little credit being asked.

Regina, Sask.

A company to be known as the Saskatchewan Broom Manufacturers, Ltd., has been incorporated in Regina, through the office of Froste and Gee, solicitors, for the purpose of carrying on the broom manufacturing plant in Parkdale subdivision. The plant has been doing big business, with orders so heavy that it has become necessary to enlarge the plant and add much new machinery, and for this purpose the company has been formed. The incorporators are C. A. Mahin, John B. Mahin, E. C. Moore, Adam Keys, and H. B. Froste. The new company has a capital of \$20,000, all taken up. The success of this Regina factory has been greatly due to the interest the people of the city have taken in it. It has a large local business.

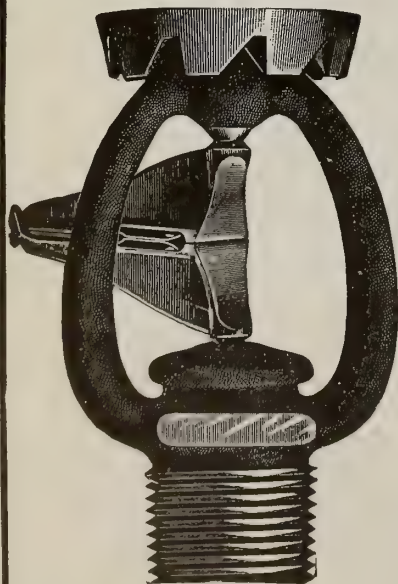
NEW BRUNSWICK.

St. John, N.B.

The port business for the month of April just ended was the best in the history of St. John. During the month, 32 ocean steamers, of a tonnage of 111,576 tons arrived, as against 20 steamers, of a tonnage of 77,716 tons in April, 1914. The wharfage returns collected by the city from these vessels were \$4,200 in excess of the same month last year. Already, the returns for May are ahead of those of last year. The outlook for the summer, from a shipping point of view, is very bright, as in addition to steam vessels, many sailing vessels have been chartered to carry forward lumber cargoes.

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- *Dominion Abrasive Wheel Co., New Toronto, Ont.

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- *The Brown Bros., Ltd., Toronto.

ACCOUNTING FORMS

- Business Systems, Ltd., Toronto.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

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- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

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- *The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL

- The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- *Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE

- E. L. Drewry, Winnipeg, Man.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS

- *Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS

- *The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS

- *T. Pringle & Sons, Montreal.

ASBESTOS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

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- Hamilton Cotton Co., Hamilton, Ont.

AWNINGS

- *Smart-Woods, Ltd., Montreal.

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- Canada Forge Co., Ltd., Welland, Ont.
- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Limited, Port Hope, Ont.
- *The Canada Metal Co., Toronto.
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- *Scythes & Co., Ltd., Toronto.
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BAGS, Cotton

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BAGS, travelling

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BAGS, travelling

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BAKING JAPAN

- *Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:

- *Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS

- *The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS and CAGES:

- *Canada Wire and Iron Goods Co., Hamilton.
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BATTERIES, dry

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BEARINGS, bronze

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BEARINGS, pillow block and up-right

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding

- *Otterville Mfg. Co., Ltd., Otterville, Ont.
- *Smart-Woods, Ltd., Montreal.

BEEP

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER

- E. L. Drewry, Winnipeg, Man.

BELTING, chains.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto.

- *J. L. Goodhue & Co., Danville, P.Q.

- *Sadler & Howarth, Montreal.

- *The D. K. McLaren Belting Co., Ltd., Montreal.

- *The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber, Limited.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES

- *Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS

- Samuel May & Co., Toronto.

BINDERS, loose leaf

- Business Systems, Ltd., Toronto.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:

- *A. C. Leslie & Co., Montreal.

BLANK BOOKS:

- Business Systems, Ltd., Toronto.

- *Morton, Phillips & Co., Montreal.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

- *Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS:

- *The Canadian Sirocco Co., Windsor, Ont.

- *Sheldons, Ltd., Galt.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND AND OILS

- *Canadian H. W. Johns-Manville Co., Toronto.

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.

- *M. Beatty & Sons, Ltd., Welland, Ont.

- *Goldie & McCulloch Co., Ltd., Galt, Ont.

- John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

- *Polson Iron Works, Ltd., Toronto

- *J. & R. Weir, Montreal, Que.

- Taylor-Forbes Co., Ltd., Guelph, Ont.

- *Jenckes Machine Co., Sherbrooke.

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, heating:

- *The Goldie & McCulloch Co., Ltd., Galt.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

- *Steel and Radiation Ltd., Toronto.

- *Warden King, Ltd., Montreal, Que.

- *The Watrous Engine Works Co., Ltd., Brantford.

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

BOILER STANDS

- Anthes Foundry Ltd., Toronto.

BOLSTERS

- *Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:

- *The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.

- *The Steel Co. of Canada, Ltd., Hamilton.

- *Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS

- R. G. McLean, Toronto.

- *The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS

- Stone Limited, Toronto.

- R. G. McLean, Toronto.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES.

- Ames-Holten-McCreedy, Ltd., Montreal, Que.

- J. Leckie Co., Ltd.

- The John Ritchie Co., Ltd., Quebec, Que.

BOWLING ALLEYS

- Samuel May & Co., Toronto.

BOXES, cellular board:

- *The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden

- G. & J. Esplen, Montreal, Que.

- Barchard & Co., Ltd., Toronto.

BRAIDS AND TRIMMINGS

- The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS

- *Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS

- *Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDEERS AND FINISHERS.

- *The Booth-Coulter Copper & Brass Co., Ltd.,

BRASS PLATES

Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS

Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.

Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Watrous Engine Works Co., Ltd., Brantford.

BRICK

National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer

National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway

Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.

*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters

Geo. Booth & Son, Toronto.

BROOMS

H. W. Nelson & Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:

Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUILDING

Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed

Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:

*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING GRANITE

McIntosh Granite Co., Ltd., Toronto.

BUILDERS, ship

*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS

The Canadian Bag Co., Ltd., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:

*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:

*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, Transmission and Cable:

*Northern Electric Co., Limited, Montreal.

CABLES, wire

The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS, ADVERTISING NOVELTIES, etc.

Rolph & Clark, Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CAMERAS

Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS

Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOEES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin

A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty

A. R. Whittall, Montreal.

CANVAS

*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

CAPS, cloth

John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES

Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS

Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light

Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame

Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS

Canadian Carbonate Company, Limited, Montreal.

CARBIDE OF CALCIUM

Canada Carbide Co., Ltd., Montreal, Que.

CARDBOARD

Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS

Toronto Carpet Mfg Co., Ltd., Toronto.

CARPETS AND RUGS, Axminster and ingrain

Toronto Carpet Mfg Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton

Toronto Carpet Mfg Co., Ltd., Toronto.

CARPET YARNS, worsted and wool

Toronto Carpet Mfg Co., Ltd., Toronto.

CARRIAGES, baby, etc.

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

CARRIERS, box and barrel

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

CARRIERS, brick

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

CARS, industrial:

*Sheldons, Ltd., Galt.

CARTONS, lithographed

Harris Lithographing Co., Toronto.

CASTINGS:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass and bronze:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.

*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Record Foundry and Machine Co., Moncton, N.B.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:

*Galt Malleable Iron Co., Ltd., Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:

*Canadian Steel Foundries, Ltd., Montreal.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA

Canadian Salt Co., Ltd., Windsor Ont.

CEMENT GUNS

Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding

Stratford Mfg. Co., Ltd., Stratford Ont.

CHAIRS, rattan and upholstered

Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS

The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETs AND CHEWING GUM

Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS

Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO

Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel

The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS

*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS

The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, WATCHMEN'S

*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS

*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING

John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

Hamilton Cotton Co., Hamilton Ont.

CLUTCHES.

*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.

COATS

Peerless Overall Co., Rock Island, Que.

COBALT OXIDE

The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS

Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE

S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers

O. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN STEEL:

*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

SOLD DRAWN SHAPES, flats, squares and hexagons:

*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

The Arlington Co., of Canada, Ltd., Toronto.

COLLARS

The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen

Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof

Williams, Greene & Rome, Berlin, Ont.

COLORS

Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name

The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS

Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:

*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.

CONCENTRATORS:

*Jenckes Machine Co., Sherbrooke.
CONCRETE COATINGS, paints, etc.
The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING

*Conduits Company, Ltd., Toronto.

CONFECTIONERY

Ganong Bros., Ltd., St. Stephens, N.B.
Moirs, Limited, Halifax, N.S.
The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT

The Western Steel & Iron Co., Ltd., Winnipeg, Man.
*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:

*Dodge Mfg. Co., Ltd., Toronto.
*Jenckes Machine Co., Sherbrooke.

COOLING APPARATUS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS

*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE

Canadian Seamless Wire Co., Ltd., Toronto.

CORKS

S. H. Ewing & Sons, Montreal, Que.

CORK CARPET

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:

*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS

Dominion Corset Co., Quebec, Que.

COTTONADES

Hamilton Cotton Co., Hamilton, Ont.

COUPLERS

*Canadian Steel Foundries, Ltd., Welland, Ont.

COUPLINGS:

*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS

Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS

De Laval Dairy Supply Co., Ltd., Montreal, Que.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:

*The Dominion Creosoting Co., Ltd., Vancouver, B.C.

CRUSHED STONE

The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:

*Jenckes Machine Co., Sherbrooke.

CUES

Samuel May & Co., Toronto.

CUFFS

The Standard Shirt Co., Ltd., Montreal, Que.

CUPOLAS,

*Sheldons, Ltd., Galt.

CUPS, presentation

Standard Silver Co., Toronto.

CUPS, grease and oil

*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR

Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille

Hamilton Cotton Co., Hamilton, Ont.

CUTLERY

Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS

Hamilton Cotton Co., Hamilton, Ont.

DERAILS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS

Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.

Grip, Ltd., Toronto.

DINING ROOM SUITES

The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES

*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS

Spramotor Co., London, Ont.

DOOR HANGERS

*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS

Daly & Morin, Montreal, Que.

DREDGES

*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt

Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS

J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES

London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:

*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric

Canadian Carbon Co., Ltd., Toronto.

DRY COLORS

P. D. Dods & Co., Ltd., Montreal, Que.

The Imperial Varnish & Color Co., Ltd., Toronto.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS

Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE

The Dominion Wire Rope Co., Ltd., Montreal.

DYERS AND FINISHERS

R. Parker & Co., Toronto.

DYNAMITE

Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating

*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN

Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

ELECTRICAL COMPOUNDS

Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.

*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE

Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES

Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING

Central Press Agency, Toronto

ELECTRICAL SUPPLIES,

*Canadian Westinghouse Co., Ltd., Hamilton.

*Jones & Moore Electric Co., Ltd., Toronto.

*Northern Electric Co., Limited, Montreal.

ELECTRO-SILVER PLATED WARE

Standard Silver Co., Toronto.

ELEVATORS:

*Jenckes Machine Co., Sherbrooke

Turnbull Elevator Mfg. Co., Toronto.

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS

Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS

*The Geo. B. Meadows, Toronto

Iron and Brass Goods Works Co., Ltd., Toronto.

ELEVATORS, hydraulic and electric

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

EMERY DRESSERS and STANDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS

R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE

McClary Mfg. Co., London, Ont.

ENGINES

*The Canadian Sirocco Co., Windsor, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

J. & R. Weir, Montreal, Que.

*Polson Iron Works, Ltd., Toronto.

*Sheldons, Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasoline

Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Massey-Harris Co., Ltd., Toronto

ENGINES, gasoline tractor plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting

*M. Beatty & Sons, Welland.

*Watrous Engine Works Co., Ltd., Brantford.

ENGINES, steam plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

Rolph & Clark, Ltd., Toronto.

Stone, Limited, Toronto.

ENGRAVERS, half-tone

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate

American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote

American Bank Note Co., Ottawa, Ont.

ENGRAVING:

*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate

Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS

J. Fleury's Sons, Aurora, Ont.

ENVELOPES

Barber-Ellis Co., Ltd., Toronto.

Canada Envelope Co., Montreal, Que.

ENVELOPES, Transos,

Business Systems, Ltd., Toronto.

EXCELSIOR PADS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR

Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS

Delany and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES

Ridout & Maybee, Toronto.

EXPLOSIVES, high

Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS

Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery

De Laval Dairy Supply Co., Ltd., Montreal, Que.

J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:

*The Canadian Sirocco Co., Windsor, Ont.

*Sheldons, Ltd., Galt.

FASTENERS, belt

*Sadler & Haworth, Montreal, Que.

FENCES and GATES:

*Dennis Wire & Iron Works Co., London.

FENCING AND GATES, woven wire

Banwell Hoxie Wire Fence Co., Hamilton, Ont.

*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire

The Great West Wire Fence Co., Ltd., Winnipeg, Man.

C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAIS:

*The E. B. Eddy Co., Ltd., Hull.

FILES

Henry Disston & Sons, Ltd., Toronto.

*The Nicholson File Co., Port Hope, Ont.

FIRE ALARMS,

*Northern Electric Co., Limited, Montreal.

FIRE DOOR HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:

*Watrous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:

*Canada Wire and Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS

*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.

*Canadian H. W. Johns-Manville Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS

*Watrous Engine Works Co., Ltd., Brantford.

FIRE HOSE

*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.

Dunlop Tire and Rubber Goods Co., Limited, Toronto.

*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*Eureka Mineral Wool & Asbestos Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS

*Pedlar People Ltd., Oshawa, Ont.

FIRE SPRINKLER SYSTEMS.

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- *The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- The Garth Co., Montreal, Que.

FISH. Atlantic Sea-Foods
Maritime Fish Corporation Ltd., Montreal.**FITTINGS FOR SOIL PIPE**

- Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
Warden King, Ltd., Montreal, Que.**FLAGS**

- *Scythes & Co., Ltd., Toronto.
- *Smart-Woods, Ltd., Montreal.

FLASHLIGHTS

- Canadian Carbon Co., Toronto.

FLOORING, hardwood

- Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS

- Standard Clay Products, Ltd., St. Johns, Que.

FORGES:

- *Sheldons, Ltd., Galt.

FORGINGS

- Canada Forge Co., Ltd., Welland, Ont.
- *The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP

- *Dominion Stamping Co., Walkerville, Ont.

FOUNTAIN FRUITS and Juices

- J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:

- *Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS,

- manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL

- Standard Fuel Co., Toronto.

FUR GARMENTS, men's and

- women's
Holt, Renfrew, Ltd., Quebec.

FUR GOODS

- John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and

- buttons
J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES

- Gurney Foundry Co., Ltd., Toronto.
- McClary Mfg. Co., London, Ont.
- The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air

- Bedford Stove Co., Bedford, Que.

FURNITURE, hall

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office

- Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office

- The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan

- Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:

- *A. C. Leslie & Co., Montreal.

GALVANIZERS

- Acme Stamping & Tool Works Ltd., Hamilton, Ont.
- *Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES

- *Ontario Wind & Pump Co., Ltd., Toronto.
- De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES

- *The Watrous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial"

- Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS,

- special underground
S. F. Bowser & Co., Toronto.

GASOLINE

- *The Imperial Oil Co., Ltd., Toronto.

GENERATORS:

- *Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
- *Canadian Westinghouse Co., Ltd., Hamilton.

GINS

- The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE

- Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut

- Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS

- Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS

- Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror

- Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS

- A. R. Clarke & Co., Ltd., Toronto

GLUE

- Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND**PLATE**

- Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS

- Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)

- J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE

- J. J. McLaughlin, Ltd., Toronto.

GRATES.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS

- Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal

- *Canada Wire & Iron Goods Co., Hamilton.

- *Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

- *The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES

- *Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES

- The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS

- B. J. Coghlin Co., Ltd., Montreal

GYPSPUM, crushed

- *Albert Mfg. Co., Hillsborough, N.B.

GYPSPUM PRODUCTS

- *Manitoba Gypsum Co., Ltd., Winnipeg, Man.
- De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE

- The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS

- F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE

- *Richards Wilcox Canadian Co., Ltd., London, Ont.

- Taylor-Forbes Co., Ltd., Guelph, Ont.

- The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING

- Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH

- Wilson Bros., Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS

- TO DETAIL
Wilson Bros., Ltd., Collingwood, Ont.

HARNESS

- Lamontagne Ltd., Montreal, Que.

HATS, men's straw

- The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's

- straw
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt

- and beaver
The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw

- Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope

- The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS

- *The Canadian Sirocco Co., Windsor, Ont.
- *Watrous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:

- *The Goldie & McCulloch Co., Ltd., Galt.

HEATING APPLIANCES:

- *Sheldons, Ltd., Galt.

HEATING SYSTEMS

- Gurney Foundry Co., Ltd., Toronto.

HESSIANS

- The Canadian Bag Co., Ltd., Montreal, Que.

- *Scythes & Co., Ltd., Toronto.

- *Smart-Woods, Ltd., Montreal.

HINGES:

- *The Steel Co. of Canada, Ltd., Hamilton.

HOISTS

- *M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.

- *M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.

- *M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
- Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial

- Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber, Limited.

HUMIDIFIERS

- *The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES

- Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS

- Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY

- The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INCUBATORS & BROODERS

- Lee Mfg. Co., Ltd., Pembroke, Ont.

INDEX CARDS

- Business Systems, Ltd., Toronto.

INJECTORS, automatic and

- autopositive
Penberthy Injector Co., Ltd., Windsor, Ont.

INSULATION, patent seamless cork

- *Canadian H. W. Johns-Manville Co., Toronto.

- The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER**TILING**

- *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS

- Standard Clay Products, Ltd., St. Johns, Que.

IRON:

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar

- Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:

- *Canada Wire & Iron Goods Co., Hamilton.
- *Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural

- *Canada Wire & Iron Goods Co., Hamilton.
- The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental

- *Canada Wire & Iron Goods Co., Hamilton.
- The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY

- A. R. Whittall, Montreal.

JAM, canned goods, etc.

- E. D. Smith & Son, Limited.

JAPANS, enamels, etc.

- A. Muirhead Co., Ltd., Toronto.

JOINTERS:

- *Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER

- S. H. Ewing & Sons, Montreal, Que.

JEWELRY, enamelled souvenir

- Caron Bros., Montreal, Que.

JEWELRY, gold filled

- Caron Bros., Montreal, Que.

JOIST HANGERS

- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR

- The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:

- *Sheldons, Ltd., Galt.

KINDLING

- Standard Fuel Co., Toronto.

KNIFE GRINDERS:

- *W. H. Banfield & Sons, Toronto.

KNITTED GOODS:

- *Penman's, Ltd., Paris, Ont.

KNIVES

- Henry Disston and Sons, Toronto, Ont.

- The Peter Hay Knife Co., Ltd., Galt, Ont.

- Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper

- Henry Disston and Sons, Toronto, Ont.

- The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

- Canadian Kodak Co., Ltd., Toronto.

LABELS

- Lawson & Jones Ltd., London, Ont.

LABELS, lithographed

- Harris Lithographing Co., Toronto.

LACE LEATHER

LARD
F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS
Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:
Canadian Billings & Spencer Ltd., Welland.

LAUNCHES
Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS
Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS
Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS
Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD
*The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS
Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET
Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE
*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER
The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'
Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy
Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS
Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole
The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather
A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.
Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.
Clarke & Clarke, Limited, Toronto.

LEATHER, upper
A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.
*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

LINOLEUM
Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED BUSINESS STATIONERY
Business Systems, Ltd., Toronto.

LITHOGRAPHED TIN WARE:
*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS
American Bank Note Company, Ottawa, Ont.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited, Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:
*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS
Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial
*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS
The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF, BINDERS AND FORMS
Business Systems, Ltd., Toronto.

LOOSE LEAF SYSTEMS
Copeland-Chaterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES
The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed
Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks
*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER
The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, decking and planing
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C. (on Fraser River).

LUMBER, Douglas fir (Oregon pine)
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, long timbers and spars
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, pickets and lath
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, red pine and spruce
Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, staves and heading
Canadian Western Lumber Co., Ltd., Fraser Mills, B.C.

LUMBER, white pine
Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, elevating.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, flour mill:
*The Goldie & McCulloch Co., Ltd., Galt.

MACHINERY, grinding
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY, hoisting, etc.
*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream
J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill
*The Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop
*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking
Sawyer-Massey Co., Ltd., Hamilton, Ont.
*Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill
The E. Long Mfg. Co., Ltd., Orillia, Ont.
P. Payette & Co., Penetanguishene, Ont.
W. P. Plant, Hastings, Ont.
*Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, special
Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery
W. P. Plant, Hastings, Ont.

MACHINERY, transmission
*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, wood working
*Berlin Machine Works, Ltd., Hamilton.
*The Watrous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:
*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting
Spramotor Co., London, Ont.

MAGNESITE
Canadian Carbonate Co., Ltd., Montreal, Que.

MAILING TUBES:
*Dominion Paper Box Co., Ltd., Toronto.

MALT:
*Hiram Walker & Sons, Ltd., Walkerville.

MANTELS, wood
W. A. Moore Co., Ltd., Meaford, Ont.

MAPS AND MAP MOUNTING
The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:
*Berlin Machine Works, Ltd., Hamilton.

MATCHES:
*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned
The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT
*Canadian Sirocco Co., Windsor, Ont.

MECHANICAL STOKERS.
*The Jones Underfeed Stoker Co., Ltd., Toronto.

MEDICINES, patented and pharmaceutical
Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt
*Canada Metal Co., Toronto.
*Tallman Brass & Metal Co., Hamilton.

METAL, spinning and stamping
The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SHINGLES:
*Metal Shingle & Siding Co., Ltd., Preston.
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.

METAL SIDING:
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
*Pedlar People, Ltd., Oshawa, Ont.

MILK BOTTLE CAPS
Business Systems, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES
De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS
Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)
Holt, Renfrew Ltd., Quebec, Que.
A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)
Holt, Renfrew, Ltd., Quebec, Que.

MONUMENTS
McIntosh Granite Co., Ltd., Toronto.

MORTISERS:
*Berlin Machine Works, Ltd., Hamilton.

MOTOR CAR PARTS AND ACCESSORIES
*Russell Motor Car Co., Ltd., Toronto.

MOTORS:
*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
*Canadian Westinghouse Co., Ltd., Hamilton.

MOTORS, D.C.
*Canadian Crocker Wheeler Co., St. Catharines, Ont.

MOTORS, electric (alternating current)
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)
*Canadian Westinghouse Co., Ltd., Hamilton.
Consolidated Electric Co., Ltd., Toronto.
*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)
Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:
*The Gramm Motor Truck Co., Ltd., Walkerville.

MOULDERS:
*Berlin Machine Works, Ltd., Hamilton.

NAILS:
*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire
Parmenter and Bulloch Co., Ltd., Gananoque, Ont.
The Graham Nail Works, Toronto.

NAME PLATES
Patterson and Heward, Toronto.

NAPHTHA
*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NUTS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.

OAKUM, plumbers', Canadian Navy Factory Waste and Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto.

OAT CRUSHERS AND FLAKERS
J. Fleury's Sons, Aurora, Ont.

OFFICE STATIONERY:

*The Montreal Lithographing Co., Ltd., Montreal.

OILS

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES

Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring

S. F. Bowser & Co., Toronto.

OIL COMPANIES

Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)

*British American Oil Co., Ltd., Toronto.

OILS, Petroleum

*The Imperial Oil Co., Ltd., Toronto.

OILCLOTHS, floor and table

Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

ORGANS

*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe

Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour

Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OSTRICH PLUMES

R. Parker & Co., Toronto.

Ovens, portable bake

Bedford Stove Co., Bedford, Que.

OVERALLS

MacKenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS

Rosmond Woollen Co., Aumont, Ont.

OVERHEAD RUNWAYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine:

*Garlock Packing Co., Hamilton.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd. Jenkins Bros., Ltd., Montreal, Que.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS

R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:

A. Muirhead Co., Ltd., Toronto.

Benjamin Moore & Co., Ltd., Toronto.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

The Imperial Varnish & Color Co., Ltd., Toronto.

The Staneland Co., Ltd., Victoria, B.C.

A. Ramsay & Sons Co., Montreal, Que.

Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

*Ault & Wiborg Co. of Canada, Toronto.

*The Dougall Varnish Co., Ltd., Montreal.

Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge

Standard Paint and Varnish Co., Ltd., Windsor, Ont.

The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PANTS

Peerless Overall Co., Rock Island, Que.

PAPER BOARDS

Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book

Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES

King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, envelope

Provincial Paper Mills Ltd., Georgetown, Ont.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, news

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building

Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordon Pulp and Paper Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, coated, book and label

*Ritchie & Ramsay, Ltd., Toronto.

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover

*Ritchie & Ramsay, Ltd., Toronto.

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board

*Ritchie & Ramsay, Ltd., Toronto.

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting

*Ritchie & Ramsay, Ltd., Toronto.

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes

Gummed Papers, Ltd., Brampton, Ont.

PAPER, label

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger

*Rolland Paper Co., Ltd., Montreal, Que.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall

Stauntons, Ltd., Toronto.

PAPER, writing

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, writing, high-grade

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:

*Dominion Paper Box Co., Toronto.

PARK SEATS

Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES

The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.

Ridout and Maybee, Toronto.

PATENT LITIGATION

Ridout and Maybee, Toronto.

PEAS AND BEANS FOR SEED

W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:

*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS

Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS

Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.

*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANOS, player

*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANO STOOLS and BENCHES

*Goderich Organ Co., Goderich, Ont.

PICKLES:

The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS:

T. A. Lytle Co., Ltd., Toronto.

PIG IRON:

*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS

ETC.

Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges.

Caron Bros., Montreal, Quebec.

PIPE, cast iron, for water and gas.

National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:

*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:

*Eureka Mineral Wood & Asbestos Co., Toronto.

PIPES, culvert

Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized

*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer.

Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings

Warden King Ltd., Montreal, Que.

PIPE AND TUBES, wrought merchant

*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines

John H. Hall & Sons, Limited, Brantford, Ont.

PISTON RODS

*The Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:

*Berlin Machine Works, Ltd., Hamilton.

PLANING MILLS

G. & J. Esplen, Montreal, Que.

PLASTER OF PARIS

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land

*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:

*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS

J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:

Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES

Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain

Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar

Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence

Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS

Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES

Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES AND DIES

Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic

William R. Perrin & Co., Ltd., Toronto.

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer

William R. Perrin & Co., Ltd., Toronto.

PRINTED BUSINESS STATIONERY

Business Systems, Ltd., Toronto.

PRINTERS

Rous & Mann, Ltd., Toronto.

R. G. McLean, Toronto.

PRINTERS, catalogue:

R. G. McLean, Toronto.

*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING

Lawson & Jones, Ltd., London, Ont.

PRODUCE

The Wm. Davies Co., Ltd., Toronto.

PROPRIETARY MEDICINES

Northrop & Lyman Co., Ltd., Toronto.

PROVISIONS

The Wm. Davies Co., Ltd., Toronto.

PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*Jeffrey Mfg. Co., Montreal, Que.

- PULP, Bleached Sulphite**
The Edward Partington Pulp and Paper Co., St. John, N.B.
- PULP, Sulphide**
Bathurst Lumber Co., Ltd., Bathurst, N.B.
- PUMPS.**
Sprimotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.
- PUMPS, ammonia**
*Bawden Machine Co., Ltd., Toronto.
- PUMPS, boiler feed.**
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt.
- PUMPS, centrifugal**
*M. Beatty & Sons, Ltd., Welland, Ont.
*Waterous Engine Works Co., Ltd., Brantford.
- PUMPS, iron**
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.
- PUMPS, tar**
*Bawden Machine Co., Ltd., Toronto.
- PUMPS, turbine, and equipment**
*Bawden Machine Co., Ltd., Toronto.
- PUMPS (Turbine and rectprocating)**
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
- PYJAMAS AND NIGHT ROBES**
Williams, Greene & Rome, Berlin, Ont.
- RADIATORS**
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.
- RAILINGS, brass and iron:**
*Dennis Wire & Iron Works Co., London.
- RAILWAY SIGNAL APPLIANCES**
General Railway Signal Co. of Canada, Ltd., Montreal, Que.
- RAILWAY SUPPLIES.**
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.
- RAILWAY TARIFF BINDERS**
The Esdale Press Ltd., Edmonton.
- READY-TO-WEAR GARMENTS, Ladies'**
H. C. Boulter Co., Ltd., Toronto.
- REAMERS**
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.
- "REDWOOD" lager**
E. L. Drewry, Winnipeg, Man.
- REED AND RATTAN GOODS**
Canada Furniture Mfgs., Ltd., Woodstock, Ont.
- REFRIGERATORS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.
- REFRIGERATING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- REFRIGERATORS, store, homes and institutions.**
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.
- REINFORCEMENT for concrete:**
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.
- RINGS, gold**
Caron Bros., Montreal, Que.
- RIVETS:**
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.
- RIVETS, bifurcated and tubular**
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
- RIVETS AND BURS, iron, copper and brass**
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
- ROLLERS, shade**
Daly & Morin, Montreal, Que.
- ROOFING, metal**
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
- ROOFING, ready to lay**
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
- ROOF TRUSSES**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
- ROPE, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- RUBBER FOOTWEAR**
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.
- RUBBER GOODS.**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
- RUBBER MOULDS**
Bawden Machine Co., Ltd., Toronto
- RULES**
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.
- RYE**
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- SADDLERY HARDWARE**
*Dominion Stamping Co., Walkerville, Ont.
- SAFES**
*Goldie & McCulloch Co., Ltd., Galt, Ont.
- SAMPLE CASES**
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.
- SANDERS:**
*Berlin Machine Works, Ltd., Hamilton.
- SANDPAPER**
Delany and Pettit, Ltd., Toronto, Ont.
- SASH CORD, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- SALT**
Canadian Salt Co., Ltd., Windsor, Ont.
- SANITARY PAPER TOWELS:**
*E. B. Eddy Co., Ltd., Hull.
- SAW SHARPENING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- SAWS**
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.
- SAWS, band:**
*Berlin Machine Works, Ltd., Hamilton.
- SAWS, crosscut**
*Berlin Machine Works, Ltd., Hamilton.
- SAWS, crosscut and oand**
Shurly & Deitrich, Galt, Ont.
- SAWS, circular mill**
Shurly & Deitrich, Galt, Ont.
- SAWS, hack:**
*Victor Saw Works, Ltd., Hamilton, Ont.
- SAWS, of all kinds**
Simonds Canada Saw Co., Ltd., Montreal, Que.
- SAWS, rip:**
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.
- SAWMILLS**
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
- SAWS, specialties**
*Victor Saw Works, Ltd., Hamilton, Ont.
- SCALES**
The Gurney Scale Co., Hamilton, Ont.
- SCALES, counter**
The Gurney Scale Co., Hamilton, Ont.
- SCALES, railway track, etc.**
The Gurney Scale Co., Hamilton, Ont.
- SCREENS:**
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.
- SCREEN DOORS AND WINDOWS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.
- SCREWS:**
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.
- SCREW PLATES**
*Butterfield & Co., Rock Island, P.Q.
- SECURITIES, engraved**
American Bank Note Co., Ottawa, Ont.
- SERGES**
Rosamond Woollen Co., Almonte, Ont.
- SHAFTING.**
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
- SHANTY BLANKETS.**
Slingsby Mfg. Co., Ltd., Brantford, Ont.
- SHAPERS:**
*Berlin Machine Works, Ltd., Hamilton.
- SHEAR BLADES, iron**
The Peter Hay Knife Co., Ltd., Galt, Ont.
- SHEATHING, asbestos corrugated:**
*Eureka Mineral Wool & Asbestos Co., Toronto.
- SHEET METAL WARE (iron, galvanized and enamelled)**
Sheet Metal Products Co. of Canada, Ltd., Toronto.
- SHEET METAL STAMPINGS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
- SHELLAC**
*Berry Bros., Ltd., Winnipeg.
- SHINGLES, asbestos cement:**
*Canadian H. W. Johns-Manville Co., Toronto.
- SHIRTS**
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island, Que.
John W. Peck & Co., Ltd., Montreal, Que.
The Standard Shirt Co., Ltd., Montreal, Que.
- SHIRTS, workmen's**
A. R. Clarke & Co., Ltd., Toronto.
- SHOE PEGWOOD**
O. Chalifour, Quebec, Que.
- SHOE LININGS**
Galt Knitting Co., Ltd., Galt, Ont.
- SHOES, running and athletic**
Ames-Holden-McCready, Ltd., Montreal, Que.
- SHOOKS**
Barchard & Co., Ltd., Montreal, Que.
- SILVER BULLION**
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
- SILVERWARE**
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.
SILVERWARE, sterling
Roden Bros., Ltd., Toronto.
SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.
SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.
SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.
SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.
SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.
SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.
SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.
*Pedlar People Ltd., Oshawa, Ont.
SLEIGHTS
Tudhope-Anderson Co., Ltd., Orillia, Ont.
SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.
SMOKE CONSUMERS.
*The Jones Underfeed Stoker Co., Ltd., Toronto.
SOAPS
J. Barsalou & Co., Ltd., Montreal, Que.
SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.
SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.
SOIL PIPE
Anthes Foundry, Ltd., Toronto.
SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.
SOLDER, silver
Geo. H. Lees & Co., Hamilton.
SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.
SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.
SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.
SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
SPLIT PEAS
H. Murton, Guelph, Ont.
SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.
SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.
SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.
SPRAYERS
Sprimotor Co., London, Ont.
SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

STAINS

R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle

A. Muirhead Co., Ltd., Toronto.

STAMPINGS

*Dominion Stamping Co., Ltd., Walkerville, Ont.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS:

*Jenckes Machine Co., Sherbrooke.

STATIONERY, office

Harris Lithographing Co., Toronto.

STEAM PIPE and BOILER COVERINGS, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS

*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES:

*Sheldons, Ltd., Galt.

STEAM TRAPS

*Canadian Sirocco Co., Windsor, Ont.

*Canadian Morehead Manufacturing Co., Limited, Woodstock.

STEEL:

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS

*The Canadian Bridge Co., Ltd., Walkerville, Ont.

*Dominion Bridge Co., Ltd., Montreal.

*Pedlar People, Ltd., Oshawa, Ont.

STEEL CASTINGS

*Canadian Steel Foundries, Ltd., Montreal, Que.

*Dominion Steel Foundry Co., Ltd., Hamilton.

STEEL PEN STOCKS:

*Jenckes Machine Co., Sherbrooke.

STEEL RODS:

*The Steel Co. of Canada, Ltd., Hamilton.

STEEL SASH:

*Dennis Wire & Iron Works, Co., London.

*Henry Hope & Sons, Ltd., Toronto.

STEEL SHELVEING:

*Dennis Wire & Iron Works, Co., London.

TELEPHONE ACCESSORIES,

*Northern Electric Co., Limited, Montreal.

STENCILS, brass

Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING

Central Press Agency, Toronto.

STOKERS,

*The Jones Underfeed Stoker Co., Ltd., Toronto.

STOOLS AND BENCHES, piano and organ

*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE

The Corinthian Stone Co., Guelph, Ont.

The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS

The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES

Tudhope-Anderson Co., Ltd., Orillia, Ont.

Bedford Stove Co., Bedford, Que.

STOVE BOARDS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS

Standard Clay Products, Ltd., St. Johns, Que.

STOVES AND RANGES

Bedford Stove Co., Bedford, Que.

Gurney Foundry Co., Ltd., Toronto.

Lee Mfg. Co., Ltd., Pembroke, Ont.

The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain

*Otterville Mfg. Co., Ltd., Otter

STRUCTURAL STEEL

Dominion Bridge Co., Montreal.

*Hamilton Bridge Works Co., Ltd., Hamilton.

*The Canadian Bridge Co., Ltd., Walkerville, Ont.

*The Structural Steel Co., Ltd., Montreal.

SUIT CASES

J. Eveleigh & Co., Ltd., Montreal.

The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:

*Berlin Machine Works, Ltd., Hamilton.

SWITCHBOARDS

*The Canadian Independent Telephone Co., Ltd., Toronto.

SWITCHES, railway

Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS

*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS

*Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLES, billiard

Samuel May & Co., Toronto.

TABLE COVERS, chenille

Hamilton Cotton Co., Hamilton, Ont.

TAGS, shipping and factory

Business Systems, Ltd., Toronto.

TANKS

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

TAPS

Pratt and Whitney Co. of Canada, Dundas, Ont.

*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES

*Butterfield & Co., Rock Island, P.Q.

TAPES, measuring

The Lufkin Rule Co., of Canada, Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed

Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES

Canadian Independent Telephone Co., Toronto.

*Northern Electric Co., Limited, Montreal, Que.

TELEPHONE APPARATUS

*The Canadian Independent Telephone Co., Ltd., Toronto.

TELEPHONES, Automatic

*Canadian Independent Telephone Co., Toronto.

TENTS

Mackenzie & Co., Ottawa, Canada.

Turner, J. J., & Sons, Peterborough, Ont.

*Scythes & Co., Ltd., Toronto.

TERRA ALBA

*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA (architectural)

Toronto Plate Glass Importing Co., Ltd., Toronto.

THEATRE CURTAINS, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:

*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.

Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Ltd.

TIMBER:

*The B.C. Mills Timber & Trading Co., Vancouver, B.C.

James Sheppard & Son, Sorel, Que.

TANNERS' SUPPLIES

McClary Mfg. Co., London, Ont.

TIN WARE (stamped, pierced, japanned and lithographed)

Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.

Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Ltd.

TRADE MARKS AND DESIGNS

Ridout & Maybee, Toronto.

TRANSFORMERS

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TRANSFORMERS, power

*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing

*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, sheet metal workers

Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track

B. J. Coghlin Co., Ltd., Hamilton, Ont.

TRANSMISSION MACHINERY.

*Dodge Mfg. Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Watrous Engine Works Co., Ltd., Brantford.

TROLLEYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS

The Gurney Scale Co., Hamilton, Ont.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber

*Watrous Engine Works Co., Ltd., Brantford.

TRUNKS

Lamontagne Ltd., Montreal, Que.

J. Eveleigh & Co., Ltd., Montreal, Que.

The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

Canadian Seamless Wire Co., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

TUBING, Gold and Silver

Canadian Seamless Wire Co., Toronto.

TURBINES, water.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TURBINES, steam:

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TURBINE AND RECIPROCATING PUMPS.

*The Bawden Machine Co., Limited, Toronto.

TWEEDS

Rosamond Woollen Co., Almonte, Ont.

TWINES, binder

Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS

Pratt and Whitney Co., of Canada, Dundas, Ont.

*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

UNDERWEAR

Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial

Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS

*Dart Union Co., Ltd., Toronto, Ont.

*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS

The Whitby Braid & Edging Co., Woodstock, Ont.

UPHOLSTERED FURNITURE, leather and tapestries

Imperial Rattan Co., Ltd.

VACUUM PUMPS

*The Bawden Machine Co., Limited, Toronto.

VALVES:

*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water

Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.

Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES

*Ault & Wiborg Co. of Canada, Ltd., Toronto.

Berry Bros., Walkerville, Ont.

*Dougall Varnish Co., Ltd., Montreal, Que.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:

*The Goldie & McCulloch Co., Ltd., Galt.

VENTILATING APPLIANCES:

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

*Sheldons, Ltd., Galt.

VENTILATING SYSTEMS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

Gurney Foundry Co., Ltd., Toronto.

VENTILATORS:

*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

*Pedlar People, Ltd., Oshawa, Ont.

VINEGAR

The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

WAGONS

Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL COPING

Standard Clay Products, Ltd., St. Johns, Que.

WASHERS:

*The Steel Co. of Canada, Ltd., Hamilton.

WASHERS, plate or wrought

London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton

Factory Waste and Metal Co., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

WATER-PROOF CEMENT**COATING**

Benjamin Moore & Co., Ltd., Toronto.

WAXED PAPER

Business Systems, Ltd., Toronto.

WEBBING, elastic

Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic

Hamilton Cotton Co., Hamilton, Ont.

WHEELS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

WHEELS, corundum

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel

*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, turbine, water.

*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHISKYS
H. W. Nelson & Co., Toronto.

WHISKY
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL
*Berry Bros., Ltd., Winnipeg.

WHITE LEAD
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.

WINDMILLS
*Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.

WINDOW SHADES
Daly & Morin, Montreal, Que.

WIRE
*Canada Wire & Iron Goods Co., Hamilton.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
The Graham Nail Works, Toronto.

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:
*Metallic Roofing Co., Ltd., Toronto.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, Insulated Electric,
*Northern Electric Co., Limited, Montreal.

WIRE, insulated electric:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

WIRE, Weatherproof:
*Northern Electric Co., Limited, Montreal.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK
C. H. Johnston & Sons, Ltd., Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

WOOD
Standard Fuel Co., Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SPLIT PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOL
*H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:
*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

*For Display Advertisement See Index Page 101

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.
SHEETS TUBES COPPER & BRASS AND RODS
SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT
115-121 SUMACH STREET TORONTO, CANADA

MADE-IN-CANADA

Toronto, Ontario

Mr. Manufacturer :—

Are you sincere in your desire to boost and make greater the British Empire by the buying of Canadian made goods? If so, look over the following list of high-grade oils, greases, compounds and paints manufactured in our oil refinery at Petrolia and our paint works at Toronto, Ontario. A postal card from you will bring you full information regarding the goods in which you are interested.

CYLINDER OIL

ENGINE OIL

MACHINE OIL

DYNAMO OIL

TANNER'S OIL

BLACK

LEATHER OIL

PARRAFINE
WAX

MINERAL
SOAP STOCK

BENZINE



WHITE LEAD

READY MIXED
PAINT

COLORS IN
OIL

VARNISHES

BLACK
JAPANS

STEEL BRIDGE
PAINTS

ROOFING
PAINTS

CUP GREASE

LINSEED OIL
SOAP

SERVICE FIRST

"BEATTY"

Material Handling Plant

Has Constant Service built right into it.

We have successfully met the growing demands of the contracting business for Fifty Years, and our reputation is based on the Service idea.

WE MAKE

Hoisting Engines, Dipper Dredges, Clamshell Dredges, Steel Scows, Dump Scows, Drill Boats Steel Derricks, Derrick Irons, Pile Drivers, Centrifugal Pumps and the "FAIVRETTE" CLAM BUCKET.

M. Beatty & Sons, Limited

MAIN OFFICE AND WORKS: Welland, Ont.

TORONTO BRANCH: 4th Floor, 154 Simcoe Street

AGENTS:

H. E. Plant, 1790 St. James St., Montreal
E. Leonard & Sons, St. John, N.B.
Robt. Hamilton & Co., Vancouver, B.C.
Kelley-Powell Limited, McArthur Bldg., Winnipeg

CONVENTION NUMBER

Vol. XVI., No. 3

JULY, 1915

\$2.00 per Year

INDUSTRIAL CANADA



309
up
Tulsa

Why Not Publish Your Own Trade Paper?

You Can Send an Edition of 2000 Copies Per Month for About \$150

Last month, one of our good clients, for whom we originated and have been doing Trade Advertising in the form of a "house organ" or private trade publication, for the past two years, said:—

"This little publication of ours has been the most profitable publicity we ever put out. We never expected to get much in the way of direct results from it. When you originated it, we regarded it mainly as an introductory help to our travellers, and as a goodwill builder, but we have had splendid results from it and—despite the retrenchment we have made in some departments, this advertising *must* go on."

The advertising he refers to costs him but eight cents per month per customer; in his case about \$85.00 per month among his established and prospective trade of approximately one thousand accounts.

Would you be interested to do something along similar lines? We think we can convince you that an investment of \$1.00 a year upon every customer and prospective customer on your books, will return you a profit. *Write us.*

J. J. GIBBONS, Limited

AGENTS FOR ADVERTISERS IN CANADA

Tribune Building
WINNIPEG

119 West Wellington Street
TORONTO

Coronation Building
MONTREAL

CABLES—"GIBJAY," TORONTO

CODE—A.B.C. 5th EDITION

PUBLISHED BY THE CANADIAN
MANUFACTURERS ASSOCIATION INCORPORATED.
HEAD OFFICE BRANCH OFFICES,
• TORONTO • MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC.



MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

Automobile Parts

Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED

Walkerville, Ont.



"Giving Satisfaction"

This is the true measure of a manufacturer's service to his constituency. It has been our constant aim since we commenced to do business eight years ago. Our large and rapidly expanding trade is proof that our products and our methods of doing business appeal to our customers.

The greatest possible care and attention are given at our Refinery to the manufacture of the different lines—the highest obtainable quality being our goal. The statement "WE MAKE THAT GOOD OIL" has now passed into a proverb as referring to the products of The British American Oil Co.

We guarantee every gallon of British "Peerless" and Motor Gasolene, Benzine, Lamp Oil, Lubricating Oil, "Ford Motor Oil," "Autolene" for other motors, Fuel Oil, Road Oil and other Products.

We are prepared to live up to the guarantee that if any of our goods are not as represented they may be returned at our expense and money will be refunded if already paid for same. In no case will we allow a customer to make a loss on account of our products not being equal to representation.

We make our products as good as we know how and have justifiable confidence in them. Our customers have a right to demand value for their money and we see that they get it. We do not pose as philanthropists; this is pure business.

Our watchword is "GIVING SATISFACTION."

The BRITISH AMERICAN OIL CO., Limited

REFINERS, FOOT OF CHERRY STREET, TORONTO

Head Office: LUMSDEN BUILDING, TORONTO

Branches: MONTREAL, OTTAWA, LONDON, WINDSOR



Union Pipe Couplings

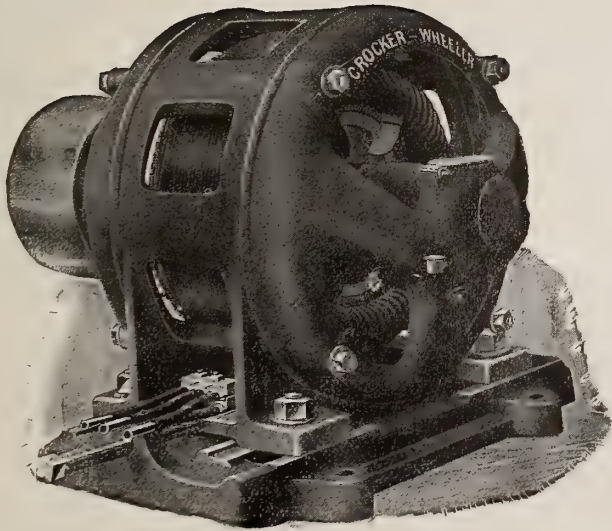
Will save you money. Will save you time.

Will save you annoyance. Will save you loss.

Are you willing?

Your jobber sells them.

DART UNION CO., LTD., TORONTO



THE DESIGN OF

CROCKER-WHEELER INDUCTION MOTORS

INCLUDES :

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features;
Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS



Head Office and Works : St. Catharines

District Offices : Montreal, Toronto, Vancouver



Our Sacred Duty

To contribute to a Fund for the relief of the unemployed does not discharge or liquidate the duty we owe to the brave men who are sacrificing their lives in the Trenches that we may live and enjoy the Blessings of Liberty and Happiness.






Better by far that we extend our Charity in an effort to use in our Mills, our Factories, in our Cities and our Homes all over this fair land, the products that Canadian labor produces, so that when the Boys come marching Home, they will be welcomed back to a Prosperous and Happy Canada.

Their sacrifice is worthy of our greatest effort—Our Duty is Plain; Canada with Canadian Labor and Capital can produce, manufacture and distribute, products sufficient to keep the Wheels of Industry Turning to the limit. The song of Prosperity and Happiness should ring out all over the land.

Let us sincerely pledge, to the extent of our needs, to purchase materials produced in Canada by Canadian Workmen, and the result of our efforts will return to us the Blessings of a Prosperous and Happy Nation.

The Steel Company of Canada, Limited

Hamilton - Toronto - Montreal - Winnipeg



We Have Prepared the Way

WE HAVE SPENT thousands of dollars on Street Car patrons impressing on them the advantages of purchasing "Made-in-Canada" Products.

We were the first in the field with a "Made-in-Canada" campaign, prepared, placed and carried out entirely at our own expense, for the benefit of Canadian Street Car advertisers.

Canadian Manufacturers

who use Street Car advertising get the direct benefit of all the money we have spent, in addition to getting the greatest possible amount of the best advertising for every dollar of their own they spend on Street Car space.

There are 1,735,685 passengers carried daily on the street car lines we control throughout Canada, and with these we have prepared the way for "Made-in-Canada" campaigns.

They are ready to purchase goods made in Canada, but they have to be told what goods are made here.

At a cost of only One Dollar you can reach over 48,000 of these consumers through an advertisement in the Street Cars.

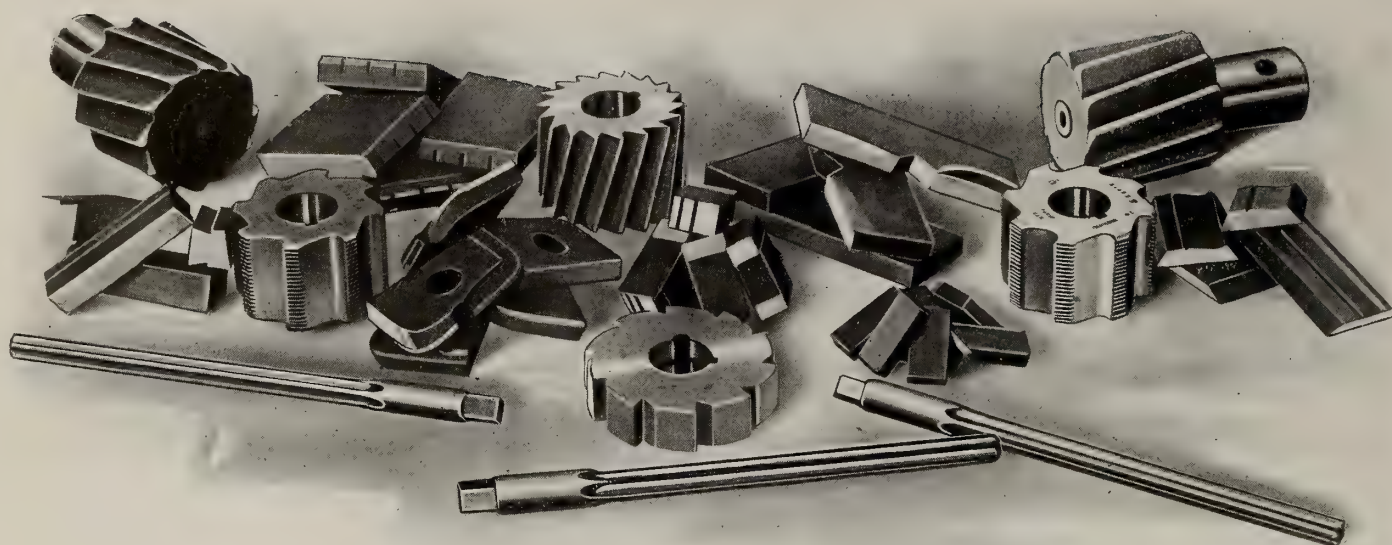
Let us tell you more about it. Any of our offices will respond promptly to a request for information.

The
Canadian Street Car Advertising Company
Limited

MONTREAL

TORONTO

WINNIPEG



SHELL TOOLS

18 Pr. SHRAPNEL 18 Pr. H.E. 4.5" HOWITSER

Shell Nose Reamers and Taps

Socket Taps and Dies

Sizing Dies for Plugs and Sockets

Bushing Taps and Reamers

Base Taps and Reamers

Body Drills and Reamers

Fuse Tube Reamers and Dies

Copper Band Turning Tools

Test Piece Cutters and Saws

Diaphragm Taps

Tin Cup and Diaphragm Seat Cutters

SPECIAL TOOLS DESIGNED OR MADE TO YOUR DRAWINGS

Pratt & Whitney Co.

OF CANADA, LIMITED

DUNDAS

ONTARIO

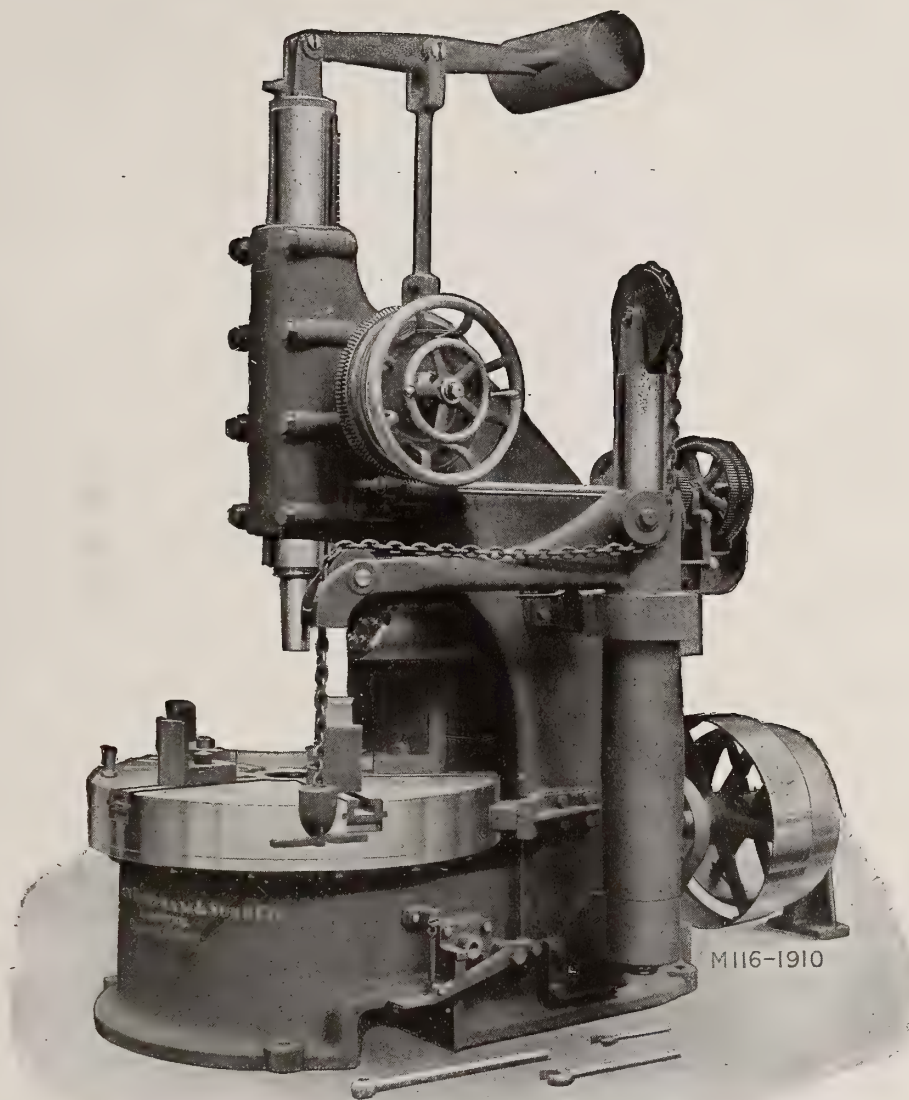
MONTREAL
723 Drummond Building

VANCOUVER
609 Bank of Ottawa Building

WINNIPEG
1205 McArthur Building



BERTRAM MACHINE TOOLS



42" CAR WHEEL BORER EQUIPPED WITH AIR
HOIST FOR WHEELS

We Manufacture a Full Line of Locomotive and
Car Shop Machinery

THE JOHN BERTRAM & SONS CO., Limited

DUNDAS, ONTARIO, CANADA

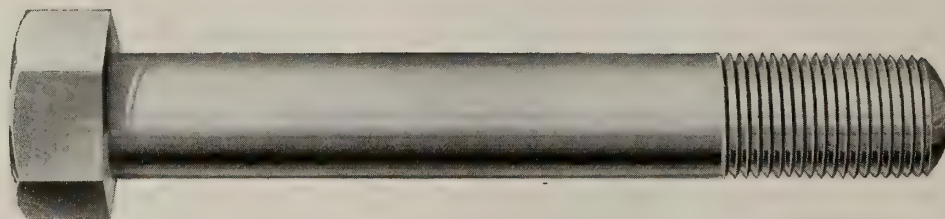
1205 McArthur Building

723 Drummond Bldg.
MONTREAL

VANCOUVER

WINNIPEG

609 Bank of Ottawa Building



SCREWS - NUTS - STUDS

Shipped Any Day From Stock

OUR stock of standard screw machine products is maintained complete at all times to insure immediate service when you need it.

The styles listed, in all sizes, are finished either neatly packaged or in bulk—

SCREWS

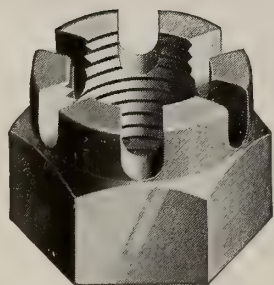
"V", U.S.S. Cap and Set Screws; A.L.A.M. Cap Screws.

NUTS

"V" U.S.S. and A.L.A.M. Nuts —Plain and Castellated.

STUDS

"V" U.S.S. or threaded promptly to order.



A buyer's list, handily indexed, will be sent upon request.

Special screw products made to specifications—sizes up to $2\frac{1}{4}$ in. diameter and $10\frac{1}{2}$ in. long.

Estimates from samples or blue prints.

THE NATIONAL-ACME MANUFACTURING CO.

In St. Henri at G.T.R. - MONTREAL, P.Q.



THE CAR BUILDER demands a paint which will cover the maximum number of square feet per gallon.

THE RAILWAY OFFICIAL demands a paint which will hold its color.

**SPECIAL PAINTS
FOR
SPECIAL CONDITIONS
ARE
OBVIOUSLY BEST**

Structural
Steel
painted with
Superior
Graphite
Paint

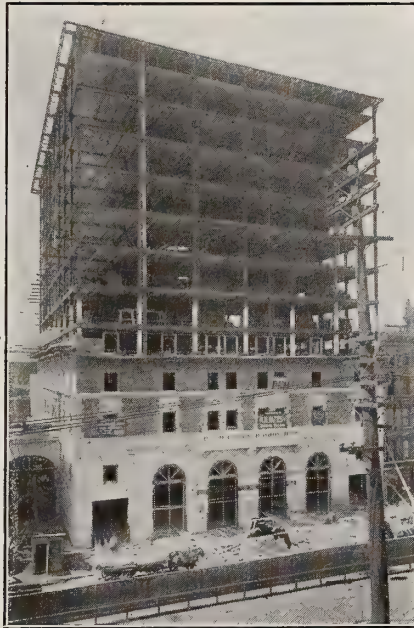
STA-WHITE: A washable, highly-reflective white for factory interiors.

Dominion Paint Works Limited

Walkerville, Ont.

Toronto
Montreal

Winnipeg
Vancouver



A PAINT THAT WILL NOT EXPAND AND CONTRACT WHEN A BRIDGE DOES, WILL CRACK, ADMIT MOISTURE UNDER THE PAINT, AND WILL CHIP OR PEEL OFF

Stonework
Water-
proofed
with
Anti-Aqua
No. 826

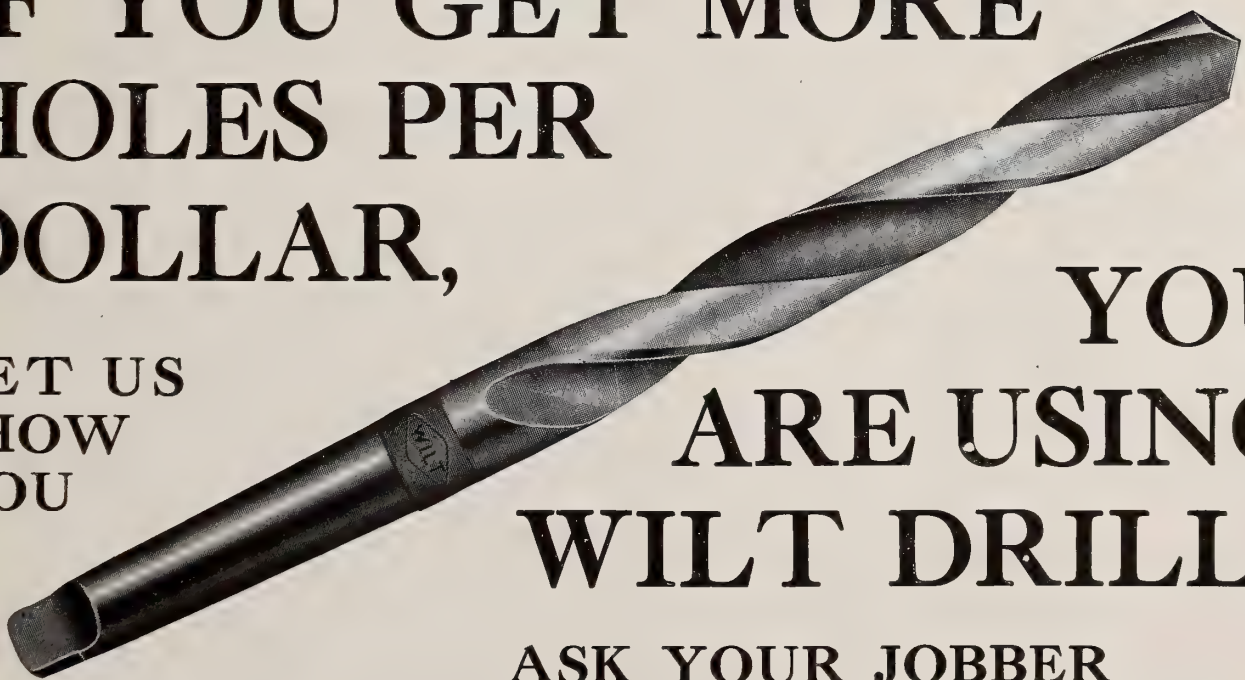
**THE LIFE OF A STRUCTURE
DEPENDS UPON
THE QUALITY OF PAINT
SPECIFIED
OR PURCHASED**

DEGRACO-TONE: Washable wall tints for office buildings.

The above are Examples of Work entrusted to Dominion Paint Works, Ltd.

IF YOU GET MORE HOLES PER DOLLAR,

LET US
SHOW
YOU



YOU ARE USING WILT DRILLS

ASK YOUR JOBBER

The Wilt Twist Drill Company of Canada, Limited
WALKERVILLE, ONTARIO

"Sirocco"

"Sirocco"
TRADE MARK

Heating, Ventilating and Cooling Systems for Industrial Plants

Efficiency is the result of modern methods and modern methods demand proper atmospheric conditions in the shop, BECAUSE with good clean air at the proper temperature men can do more and better work.

The "Sirocco" System gives results which aid production. Our Engineering Department will gladly tender on your requirements. Your request will bring literature.

CANADIAN **Sirocco** COMPANY
LIMITED

Sales Engineers.

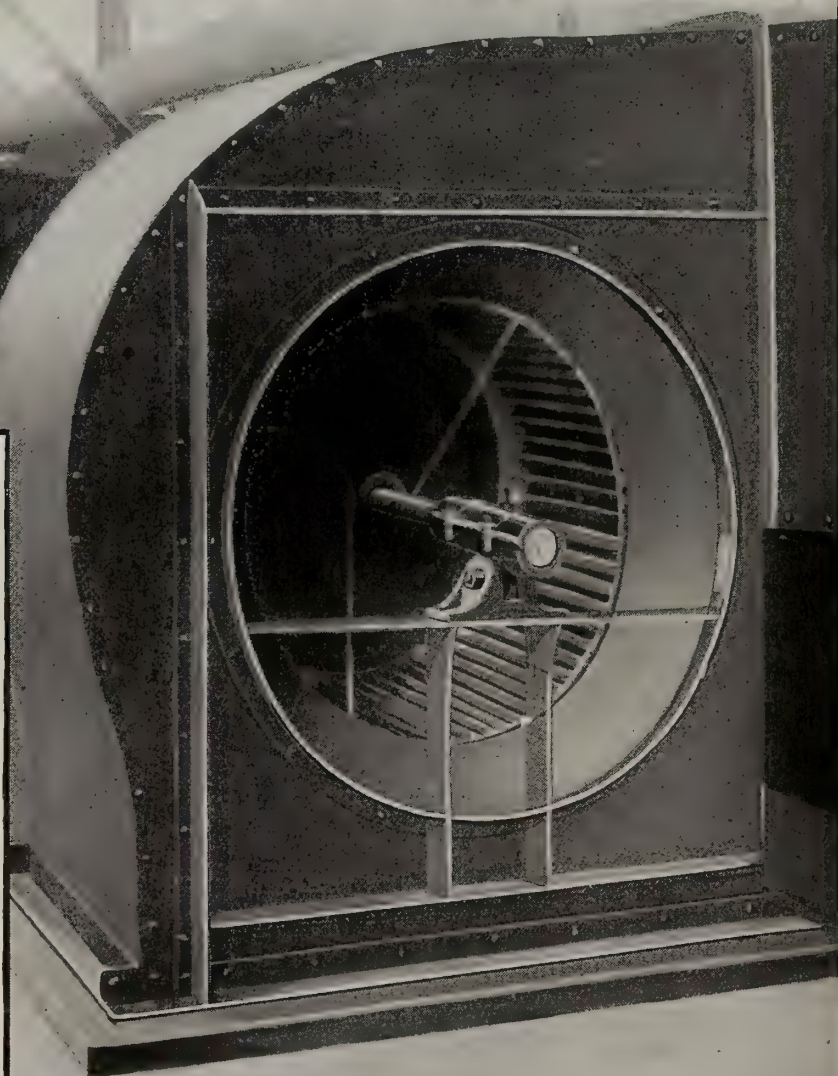
Montreal
A. M. Nichol,
301 McGill Bldg;

Toronto
Clark T. Morse,
83 Wilson Ave.

Winnipeg
W. P. Eddy,
214 Donald St.

Calgary
S. S. Clarke,
605 2nd Street.

Vancouver B.C.
H. V. Heard,
604 Credit Foncier Bldg.



NOVA SCOTIA STEEL AND COAL CO., LIMITED

IRON MINES:

Wabana, Newfoundland

COLLIERIES, IRON AND STEEL
FURNACES:

Sydney Mines, Cape Breton

FINISHING MILLS, FORGE AND
ENGINEERING SHOPS:

New Glasgow, N.S.

THE Company's new Steam-Hydraulic Forge Shop is now in operation, as also is their recently installed "Harmet" Fluid-Compression Plant.

These improvements bring "Scotia's" equipment abreast of the best foreign forges.

We are accordingly open to supply forgings of all shapes and sizes, made of best open-hearth or fluid-compressed steel, and satisfying the most severe specifications.

"OLD SYDNEY COAL"
Shipping Port, North Sydney, C.B.

FOR PRICES AND PARTICULARS, APPLY TO:

Western Coal Sales Office, Board of Trade Building, Montreal, Que.

Western Steel Sales Office, Room 14, Windsor Hotel, Montreal, Que.

OR

Head Office: NEW GLASGOW, N.S.

Bank of Montreal

ESTABLISHED 1817 ∴ INCORPORATED BY ACT OF PARLIAMENT

Capital Authorized	-	\$25,000,000.00
Capital Paid up	-	16,000,000.00
Rest	- - -	16,000,000.00
Undivided Profits	-	1,252,864.00

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

R. B. Angus, Esq.	H. V. MEREDITH, Esq., <i>President.</i>	
Hon. Robt. Mackay,	E. B. Greenshields, Esq.,	Sir William Macdonald,
A. Baumgarten, Esq.,	Sir Thos. Shaughnessy, K.C.V.O.	C. R. Hosmer, Esq.,
	C. B. Gordon, Esq.,	H. R. Drummond, Esq.,
	D. Forbes Angus, Esq.,	Wm. McMaster, Esq.
	Sir Frederick Williams-Taylor, LL.D., <i>General Manager.</i>	
	A. D. Braithwaite, <i>Assistant General Manager.</i>	
C. Sweeny, <i>Supt. British Columbia Branches.</i>	F. J. Cockburn, <i>Supt. Quebec Branches.</i>	
E. P. Winslow, <i>Supt. North-West Branches.</i>	D. R. Clarke, <i>Supt. Maritime Provs. and Nfld. Branches.</i>	

BRANCHES IN CANADA

At all important Cities and Towns in the following provinces :

Province of Ontario	Province of New Brunswick	Province of Nova Scotia
Province of Quebec	Province of Prince Edward Island	Province of Saskatchewan
Province of Manitoba	Province of British Columbia	Province of Alberta

BRANCHES OUTSIDE OF CANADA

LONDON, ENG.—47 Threadneedle St., E.C., G. C. Cassels, Esq., Manager. Sub-Agency, 9 Waterloo Place, Pall Mall, S.W.

NEW YORK, N.Y.—64 Wall St., R. Y. Hebden, W. A. Bog, J. T. Molineux, Agents.

CHICAGO, ILL.—108 South La Salle St.

SPOKANE, State of Washington.

ST. JOHN'S, Newfoundland.

CURLING, Newfoundland.

GRAND FALLS, Newfoundland.

Bankers in Great Britain

LONDON—The Bank of England; The Union of London and Smith's Bank, Ltd.; London County and Westminster Bank, Ltd.; The National Provincial Bank of England, Ltd.

LIVERPOOL—The Bank of Liverpool, Ltd.

SCOTLAND—The British Linen Bank and Branches.

Bankers in the United States

NEW YORK—The National City Bank; National Bank of Commerce; National Park Bank.

PHILADELPHIA—Fourth St. National Bank.

ST. LOUIS—The Mechanics-American National Bank.

BOSTON—The Merchants National Bank.

CLEVELAND—The First National Bank of Cleveland.

PITTSBURG—The Bank of Pittsburg, N.A.

DETROIT—The First and Old Detroit National Bank.

BUFFALO—The Manufacturers' and Traders' National Bank

SAN FRANCISCO—First National Bank of San Francisco; The Anglo and London-Paris National Bank.

MINNEAPOLIS—Northwestern National Bank.

SEATTLE—Seattle National Bank.

ST. PAUL—First National Bank of St. Paul.

Savings Department connected with each Canadian Branch, and interest allowed at current rates.

Collections at all points of the world undertaken at most favorable rates.

Travellers' Cheques, Limited Cheques and Travellers' Letters of Credit issued negotiable in all parts of the world.

This bank, with its branches at every important point in Canada, offers exceptional facilities for the transaction of a general banking business.

UNION BANK OF CANADA

ESTABLISHED 1865

HEAD OFFICE - WINNIPEG

Paid-up Capital	-	-	-	\$5,000,000
Reserve	-	-	-	3,400,000
Total Assets over	-	-	-	80,000,000

BOARD OF DIRECTORS

Honorary President	-	-	WILLIAM PRICE, ESQ.
President	-	-	JOHN GALT, ESQ.

VICE-PRESIDENTS

R. T. Riley, Esq.	G. H. Thomson, Esq.
W. R. Allan, Esq.	S. Haas, Esq.
Hon. S. Barker, Esq., P.C.M.P.	F. W. Heubach, Esq.
M. Bull, Esq.	Wm. Shaw, Esq.
Lt.-Col. John W. Carson.	
B. B. Cronyn, Esq.	
E. L. Drewry, Esq.	
F. E. Kenaston, Esq.	

G. H. BALFOUR, General Manager.

H. B. SHAW, Asst. Gen. Manager.

F. W. S. CRISPO, Supt. of Branches and Chief Inspector.

A Comprehensive Banking Service

To manufacturers and business firms generally the **Union Bank of Canada** offers every form of service which a progressive bank can render—a service much more complete and valuable because of the

Network of Over 320 Branches

in Canada, extending from Halifax to Prince Rupert, and distributed as follows:

MARITIME PROVINCES and QUEBEC, 16 branches.
ONTARIO, over 95 branches.
MANITOBA, over 40 branches.

SASKATCHEWAN, over 90 branches.
ALBERTA, over 50 branches.
BRITISH COLUMBIA, over 20 branches.

MERCHANTS BANK OF CANADA

Established 1864

Statement of Liabilities and Assets at 30th April, 1915

LIABILITIES

1. To the Shareholders.

Capital Stock paid in.....	\$ 7,000,000.00
Rest or Reserve Fund.....	7,000,000.00
Dividends declared and unpaid	175,710.00
Balance of Profits as per Profit and Loss Account.....	245,140.70
	<u>\$14,420,850.70</u>

2. To the Public.

Notes of the Bank in Circulation	\$ 6,204,069.00
Deposits not bearing interest	12,692,061.44
Deposits bearing interest (including interest accrued to date of statement)	50,037,101.89
Balances due to other Banks in Canada	933,204.92
Balances due to Banks and banking correspondents in the United Kingdom and foreign countries....	1,207,076.30
Bills payable.....
Acceptances under letters of credit.....	696,100.26
Liabilities not included in the foregoing
	<u>\$86,190,464.51</u>

ASSETS

Current coin held (see also deposit in Central Gold Reserve)	\$ 2,693,330.53
Dominion Notes held	12,732,618.75
Notes of other Banks	564,711.00
Cheques on other Banks	2,833,748.30
Balances due by other Banks in Canada	3,110.67
Balances due by Banks and banking correspondents elsewhere than in Canada	2,232,655.91
Dominion and Provincial Government securities, not exceeding market value.....	583,997.72
Canadian Municipal securities, and British, Foreign and Colonial public securities, other than Canadian, not exceeding market value	903,667.02
Railway and other Bonds, Debentures and Stocks, not exceeding market value	4,968,195.58
Call Loans in Canada on Bonds, Debentures and Stocks	3,606,342.89
Call Loans elsewhere than in Canada	964,193.14
	<u>\$32,086,571.51</u>
Other Current Loans and Discounts in Canada (less Rebate of Interest)	47,401,858.68
Other Current Loans and Discounts elsewhere than in Canada (less Rebate of Interest)	100,240.32
Liabilities of customers under letters of credit as per contra	696,100.26
Real Estate other than bank premises	118,816.77
Overdue debts, estimated loss provided for	144,721.63
Bank Premises, at not more than cost, less amounts written off	4,166,147.94
Deposit with the Minister for the purposes of the Circulation Fund	335,000.00
Deposit in the Central Gold Reserve	1,000,000.00
Other Assets not included in the foregoing	141,007.40
	<u>\$86,190,464.51</u>

K. W. BLACKWELL,
Vice-President.

E. F. HEBDEN,
General Manager.

Report of the Auditors to the Shareholders of The Merchants Bank of Canada.

In accordance with the provisions of sub-Sections 19 and 20 of Section 56 of the Bank Act we report to the shareholders as follows:—

We have examined the above Balance Sheet with the Books of Account and other records of the Bank at the Chief Office and with the signed returns from the Branches and Agencies.

We have checked the cash and verified the securities of the Bank at the Chief Office against the entries in regard thereto in the books of the Bank as on April 30th, 1915, and at a different time during the year and found them to agree with such entries. We have also attended at several of the Branches during the year and checked the cash and verified the securities held at the dates of our attendance and found them to agree with the entries in the books of the Bank with regard thereto.

We have obtained all the information and explanations we have required. In our opinion the transactions of the Bank which have come under our notice have been within the powers of the Bank, and the above Balance Sheet is properly drawn up so as to exhibit a true and correct view of the state of the Bank's affairs according to the best of our information and the explanations given to us and as shown by the books of the Bank.

VIVIAN HARCOURT,
of Deloitte, Plender, Griffiths & Co. }
J. REID HYDE, } *Auditors.*
of Macintosh & Hyde.

Montreal, 25th May, 1915.

THE DOMINION BANK

HEAD OFFICE: TORONTO

Capital Paid up - - - \$6,000,000

Reserve Fund - - - \$7,000,000

Sir Edmund B. Osler, M.P., President W. D. Matthews, Vice-President
C. A. Bogert, General Manager

BANKING BUSINESS OF EVERY DESCRIPTION TRANSACTED

The Accounts of Manufacturers, Traders
and Others Carried on Favorable Terms

Commercial Letters of
Credit Issued

Available Throughout
the World

London, England, Branch: 73 Cornhill, E.C.

THE ROYAL BANK OF CANADA

Capital Authorized, \$25,000,000

Capital Paid Up - \$11,560,000

Reserve Funds - \$13,174,000

Total Assets - - \$180,000,000

BOARD OF DIRECTORS

SIR HERBERT S. HOLT, *President*

E. L. PEASE, *Vice-President*

E. F. B. JOHNSTON, K.C., *2nd Vice-President*

WILEY SMITH T. J. DRUMMOND

HON. D. MACKEEN WM. ROBERTSON

JAMES REDMOND A. J. BROWN, K.C.

G. R. CROWE W. J. SHEPPARD

D. K. ELLIOTT C. S. WILCOX

HON. W. H. THORNE A. E. DYMENT

HUGH PATON C. E. NEILL

OFFICERS

E. L. PEASE, *General Manager*

C. E. NEILL } *Assistant General Managers*
F. J. SHERMAN }

W. B. TORRANCE, *Superintendent of Branches*

BRANCHES

380 Branches throughout the Dominion of Canada, in
Newfoundland, the West Indies, London, Eng., and
New York, U.S.A.

Statement to the Dominion Government (Condensed) Showing Condition of the Bank on April 30, 1915

LIABILITIES	
Capital Paid Up.....	\$ 11,560,000.00
Reserve Fund.....	12,560,000.00
Undivided Profits.....	614,062.25
Notes in Circulation.....	12,252,149.29
Deposits.....	139,302,545.50
Due to Other Banks.....	3,366,978.88
Bills Payable (Acceptances by London Branch).....	861,275.13
Acceptances under Letters of Credit.....	404,115.22
	<u>\$180,921,126.27</u>
ASSETS	
Cash on Hand.....	\$ 20,333,988.91
Deposit in Central Gold Reserves.....	1,500,000.00
Notes of and Cheques on other Banks.....	8,270,617.66
Due from other Banks.....	5,946,909.93
Government and Municipal Securities.....	3,882,547.56
Railway and other Bonds, Debentures and Stocks.....	13,611,477.55
Call Loans on Stocks and Bonds.....	21,509,626.10
Deposit with Dominion Government for Security of Note Circulation.....	578,000.00
	<u>\$ 75,633,167.71</u>
Loans and Discounts.....	98,061,647.32
Liabilities of Customers under Letters of Credit as per contra	404,115.22
Bank Premises.....	6,197,756.34
Real Estate other than Bank Premises.....	624,439.68
	<u>\$180,921,126.27</u>

A GENERAL BANKING BUSINESS TRANSACTED

THE BANK OF BRITISH NORTH AMERICA

Established in 1836.

Incorporated by Royal Charter in 1840.

Paid-up Capital	-	-	-	-	\$4,866,666.66
Reserve Fund	-	-	-	-	\$3,017,333.33

Head Office—5 GRACECHURCH STREET,
J. DODDS, Secretary.

LONDON, E.C.
W. S. GOLDBY, Manager.

COURT OF DIRECTORS

F. R. S. Balfour
J. H. Brodie
J. H. Mayne Campbell

E. A. Hoare
E. Geoffrey Hoare
Frederic Lubbock

C. W. Tomkinson
G. D. Whatman

Head Office in Canada

ST. JAMES STREET, MONTREAL

H. B. MACKENZIE, General Manager

J. ANDERSON	-	-	Superintendent of Branches
H. A. HARVEY	-	-	Superintendent of Eastern Branches, Montreal
J. McEACHERN	-	-	Superintendent of Central Branches, Winnipeg
O. R. ROWLEY	-	-	Chief Inspector
A. S. HALL	-	-	Inspector of Branch Returns
J. H. GILLARD, and N. V. R. HUUS	-	-	Inspectors
B. C. GARDNER and H. R. POWELL	-	-	Assistant Inspectors

This Bank has branches in all the principal Cities of Canada, including Dawson City (Y.T.), and Agencies at New York and San Francisco in the United States. Agents and Correspondents in every part of the world.

COLLECTIONS MADE AT LOWEST RATES

**Drafts, Money Orders, Circular Letters of Credit and Travellers' Cheques issued,
Negotiable anywhere**

Agents in Canada for Colonial Bank, London and West Indies

SAVINGS DEPARTMENT AT EVERY BRANCH



Head Office:—TORONTO

PAID-UP CAPITAL \$7,000,000

RESERVE FUND \$7,000,000

PELEG HOWLAND, President. E. HAY, General Manager.



One hundred and twenty-six branches located at the Industrial and Agricultural centres throughout Canada provide a valuable aid to the Canadian manufacturer in conducting his business.

Collections made in Canada and in foreign countries at the lowest possible rates.

Customers are invited to take advantage of the Bank's resources for securing reliable information about conditions in any part of Canada.

SAVINGS DEPARTMENT AT ALL BRANCHES.

BANK OF HAMILTON

HEAD OFFICE, HAMILTON

Capital Authorized	- - - -	\$5,000,000
Capital Paid Up	- - - -	3,000,000
Reserve and Undivided Profits	- -	3,750,000

BOARD OF DIRECTORS

Sir John S. Hendrie, K.C.M.G., President
C. C. Dalton
Robt. Hobson
J. Turnbull

Cyrus A. Birge, Vice-President
Geo. Rutherford
C. H. Newton
W. A. Wood

J. P. Bell, General Manager

BRANCHES THROUGHOUT ONTARIO
THE NORTHWEST AND BRITISH COLUMBIA

Correspondents in Great Britain—National Provincial Bank of England, Limited

CORRESPONDENTS IN UNITED STATES

New York—Hanover National Bank
Boston—National Shawmut Bank
Buffalo—Marine National Bank
Chicago—Continental and Commercial National Bank
Detroit—First and Old Detroit National Bank
Minneapolis—First and Security National Bank

Kansas City—Southwest National Bank of Commerce
Philadelphia—First National Bank
Pittsburg—Exchange National Bank
St. Louis—National Bank of Commerce
San Francisco—Crocker National Bank
Seattle—Bank of California

Collections effected in all parts of Canada promptly and cheaply. Correspondence solicited

SAVINGS DEPARTMENT AT ALL BRANCHES



THE MERCHANTS BANK OF CANADA

ESTABLISHED
1864

HEAD OFFICE: MONTREAL

<i>Paid-up Capital</i>	- - -	\$7,000,000
<i>Reserve Fund</i>	- - -	\$7,245,140

BOARD OF DIRECTORS

President: SIR H. MONTAGU ALLAN

THOS. LONG
ALEX. BARNET
F. ORR LEWIS
ANDREW A. ALLAN
C. G. BALLANTYNE

E. F. HEBDEN, General Manager.

Vice-President: K. W. BLACKWELL

A. J. DAWES
F. HOWARD WILSON
F. ROBERTSON
G. L. CAINS
A. B. EVANS

T. E. MERRETT, Superintendent and Chief Inspector.

209 Branches in Canada, Extending from the Atlantic to the Pacific
affording exceptional advantages for making COLLECTIONS

A GENERAL BANKING BUSINESS TRANSACTED

Commercial Letters of Credit issued, available in China, Japan and other Foreign Countries. Letters of Credit and Cheques issued to travellers, available in all parts of the World.

Drafts sold, available in any city or banking town in the United Kingdom or the United States. Money Orders issued, payable at any banking point in the Dominion.

SAVINGS DEPARTMENT AT ALL BRANCHES

Deposits received of One Dollar and upwards, and interest allowed at 3 per cent. per annum.

NEW YORK AGENCY: 63 and 65 Wall Street

AGENTS IN GREAT BRITAIN: The London Joint Stock Bank, Limited; The Royal Bank of Scotland

DODGE

MADE IN CANADA

SHAFTING HANGERS PULLEYS

WE have given a real service to a great many institutions who have hurriedly fitted up to make "shells"—our large stocks enabled us to do this—and more than ever before have our large facilities counted. This has been a time when the man with the goods surely had the call, and on the question of

Power Transmission Machinery

The Dodge Company have the goods both in quantity, kind and price.

If our complete catalogue is not in your Cabinet, send for one; it's a good book to have.

Dodge Manufacturing Co., Limited
TORONTO - MONTREAL

FOREN & Co.
TIRES FOR AUTO TOURS
 Code -
 "DISTANCE LENDS ENCHANTMENT"

TILING
 PACKING
 MOTORCYCLE TIRES
 HORSE SHOE PADS
 MATS

RUBBER SPECIALTIES
 CARRIAGE TIRES
 AUTO TIRES
 BICYCLE TIRES

HEELS
 BELTING
 HOSE
 MOTOR TRUCK TIRES
 VALVES

THE  LINE
 DUNLOP

Lost!

Strayed from Canada,
 some time during the year,
 a thoroughbred rubber
 order, valued at \$3,000,000.
 Answers to the name of Supersti-
 tion. Has a bad habit of wandering
 from his own backyard.

OUT FOR
 ENJOYMENT

THERE'S NO ROYAL
 ROAD TO EARNING

IN FOR
 WORK

BUYING ABROAD IS
 PREPOSTEROUS!
 MY PRODUCTS
 HAVE NO SUPERIOR
 ANYWHERE.

BUYING ABROAD SELF-DECEPTION

The rubber-made goods in-
 dustry has reached such a
 state of excellence in Canada
 that in no other country can
 it be surpassed. Therefore, to
 buy anything made of rubber
 from a foreign country is
 nothing less than self-decep-
 tion. Not a single argument
 can be advanced in its favor.

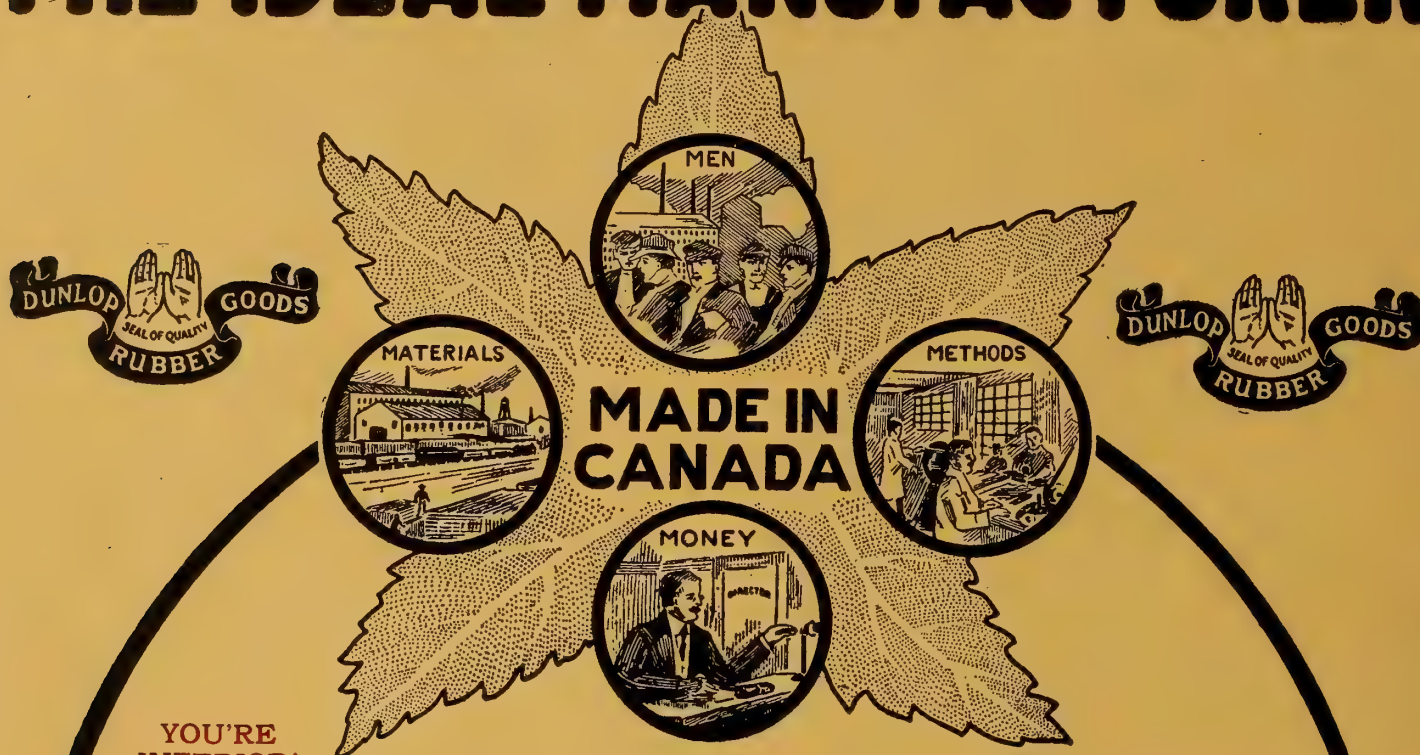
DIogenES
 SEARCHING FOR
 HONEST REASONS
 FOR BUYING
 ABROAD

It will, no doubt, amaze you to know that
 approximately three million dollars' worth of
 rubber goods (exclusive of rubber footwear, coats,
 cements, etc.) are imported into Canada each
 year. Here are the figures:

Tires, Bicycle, Motor Car, etc.	\$1,455,066
Belting, Rubber.....	87,825
Packing, Mats and Matting.....	96,679
Fire Hose	142,845
Other Rubber Products (excluding footwear)	1,101,034
Total.....	\$2,883,449

Continued on Next Three Pages.

THE IDEAL MANUFACTURER



**YOU'RE
INFERIOR!**

I'M NOT!

Buying abroad always hints at the inferiority of one's own countrymen. Yet the man who would be the first to deny that his Made-In-Canada goods had a superior abroad is often the first to buy on the basis that the other fellow's Made-In-Canada goods are inferior to those made in foreign countries.

POCKET BOOK, PATIENCE—BOTH TAXED

Then, every time you pass up your home products, you, unconsciously, perhaps send the price higher for the man who buys at home. This very fellow, who may be on your list of customers, is probably paying more for certain Made-In-Canada goods than he might have had to pay if you had also contributed to keep the cost down. He may, in his next purchasing move, pass yours and ours and all other Made-In-Canada products up for the foreign articles, which are perhaps cheaper. And thus it goes. A meaningless purchasing attitude steers Nowhere, and keeps Commercial Canada upside-down.

PURCHASING AGENTS WIELD POWER

This message is primarily intended for Canadian Purchasing Agents. The success or failure of the Made-In-Canada idea is in their hands.

WHAT ABOUT THAT BELTING?

Yes, that Belting in your Factory? Was it made in Canada? We manufacture every known type of belt. In mines, elevators, factories, paper mills, saw mills, etc., you will find Dunlop Belts giving their best service, which service is not one whit inferior to what a foreign-made belt could give.



ALL'S WELL THAT ENDS WELL
Good as far as the label - WILL NOT DO

Continued on Next Page.

DUNLOP GOODS RUBBER
SEAL OF QUALITY

THE FOOD IN THE PAIL,
THE MONEY THAT BOUGHT
THE FOOD, AND THE PAIL
ITSELF WERE ALL
MADE-IN-CANADA

**CANADIAN PURCHASING
AGENTS' CHORUS -**
"I WILL! I WILL! I'LL
BUY MY GOODS
IN CANADA!"

**WHAT ABOUT THAT
PACKING?**
Was it made in Canada; if not, why not? Dunlop Packing, for all purposes, is equal, if not superior, in every particular to the foreign-made article. Dunlop experience in the making of Packings covers many years, and the standard created is such that no user need have any doubt as to quality. The wide range of Dunlop Packings at your disposal is exclusive—sufficient for any need, efficient for every condition.

WHAT ABOUT THAT HOSE?
Was it made in Canada; if not, why not? No need to feel dubious about the quality of Dunlop Made-in-Canada Hose. Every length is trade-marked with that widely-known "Two Hands" seal, universally recognized as marking the standard of rubber-made goods. There is a special Dunlop Hose for every purpose. We manufacture all grades of Fire, Steam, Suction, Garden, Acid, Pneumatic Tool, Air Drill and Oil Tank Hose, besides a great many other varieties too numerous to mention here. Many thousand feet of Hose have emanated from the Dunlop factories.

WHAT ABOUT THAT MATTING AND TILING?
Were they made in Canada; if not, why not? Dunlop Tiling in evidence in many coaches of Canadian railroads, and in various large buildings, shows that the Dunlop Made-in-Canada article is equal to the task. Dunlop Rubber Mats and Matting—Perforated, Moulded and Corrugated—for doorsteps, hallways, elevators, stair-landings, vestibules; and Dunlop Inlaid and Plain Rubber Tiling for libraries, banks, steamships, railroad coaches, have wearing qualities, as well as numerous other advantages, that no other mat or floor covering ever possessed. The service rendered dispels all fears regarding the durability, efficiency and economy effected in the use of the Canada-Made product.

**"IF HIS STUFF IS
RIGHT GIVE HIM THE
ORDER. HE BUYS
MADE-IN-CANADA
GOODS FROM ME."**

THE ENDLESS CHAIN OF SUCCESS

Continued on Next Page.



**"I NEVER KNEW
WHERE THAT LIGHT
CAME FROM
BEFORE!"**

**IT PAYS
TO BUY
AT HOME**

**What About Those Tires
on Your Auto, Truck,
Bicycle, Motorcycle or Carriage?**

Were they made in Canada; if not, why not? Foreign-made tires—whether pneumatic or solid—have yet to show that they are superior, or even equal, to Dunlop Made-In-Canada tires. With a reputation of over twenty years back of them, Dunlop Bicycle tires are still in the lead both in quality and in number. And Dunlop Auto, Truck, Motorcycle, and Carriage Tires have successfully upheld the ideals in tire making for which the Dunlop Company continuously strives, and which knowing users continually demand.

REALLY MADE-IN-CANADA

THE

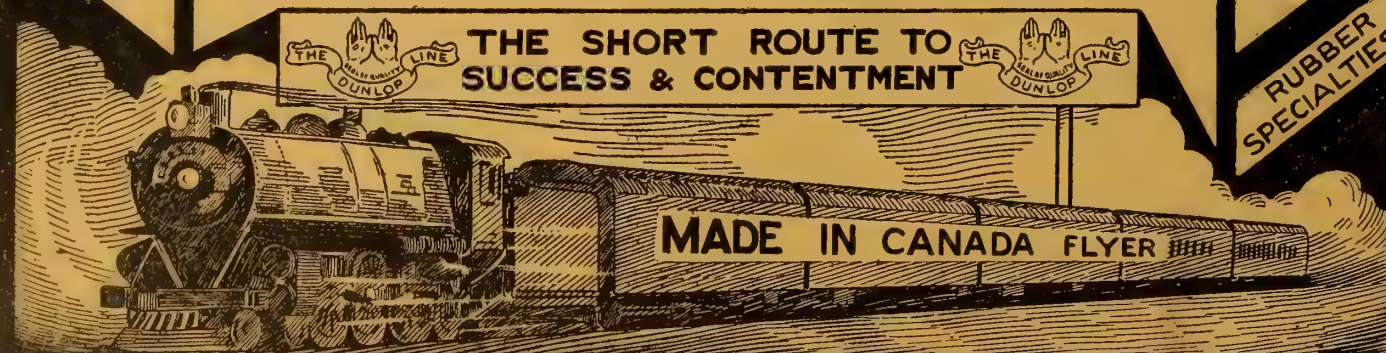
MATERIALS	-	You Use
METHODS	-	You Follow
MEN	-	You Employ
MONEY	-	You Finance On

THAT'S THE DUNLOP IDEA OF IT

We believe it takes more than a roof in Canada to give genuineness to the Made-In-Canada claim. It takes Canadian money, Canadian workmen, Canadian brains. Not a dollar of foreign money is invested in the Dunlop Company. Not a solitary director lives outside Canada. Dunlop policies are not dictated by "parent" companies or trusts located in other countries. All the Dunlop dividends—as well as wages—stay in Canada, too. So Dunlop Canadianism is as exclusive as Dunlop quality.

**BELTING
HOSE
PACKING
MATS
HEELS**

**AUTO
TIRES
MOTORTRUCK
TIRES
MOTORCYCLE
TIRES
BICYCLE
TIRES
CARRIAGE
TIRES
HORSE SHOE
PADS
TILING
VALVES
RUBBER
SPECIALTIES**



ALL ABOARD! WILL WE RESERVE A BERTH FOR YOU?



You Wouldn't Run Your Auto Till It Fell Apart

You try to keep your car at its *highest* efficiency. When a part becomes worn, you replace it promptly. You don't wait for it to fall apart.

THEN—WHY LET YOUR MEN USE FILES TILL THEY'RE COMPLETELY WORN OUT?

At a certain point in its life on *any* work, a File's *best* efficiency is lost. Beyond that point, it's like a car with a cracked cylinder or broken valve.

Its reduced efficiency means a *loss*. In time ---in money---or in both.

For the sake of *better profits*, enforce the rule among your men that all worn files must

KEARNEY & FOOT
GREAT WESTERN
AMERICAN
ARCADE
GLOBE

Made in Canada

be discarded promptly, and replaced with the "Famous Five."

They are the finished product of 50 years' experience—in producing 60,000,000 files per year. In our five great plants—we control every process from steel to file. That means absolutely uniform file-service—year in, year out. And the fact that we supply 90 per cent. of Canada's file requirements, proves that the "Famous Five" (used right) *cut down file costs*.

Write to-day for FREE copy of "File Philosophy" and our Catalog. Over 4,000 different patterns—the RIGHT file for every need.

NICHOLSON FILE COMPANY

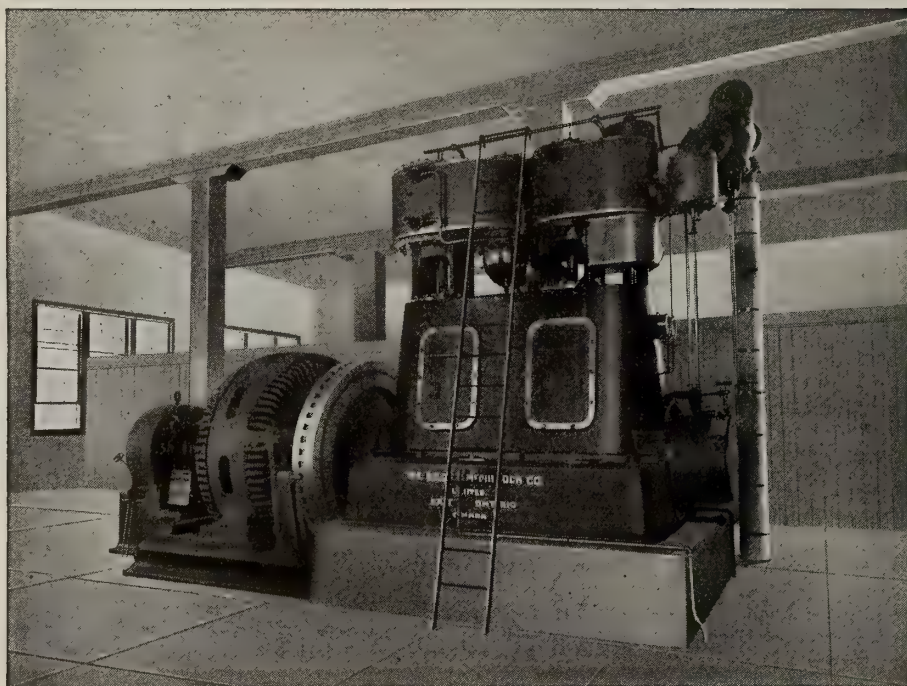
PORT HOPE, ONTARIO



POWER EQUIPMENT

Engines, Boilers, Heaters, Tanks, Pumps, Condensers and Transmission Machinery, Designed by Experts to Give the Highest Possible Efficiency

MADE
IN
C
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D
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MADE
IN
C
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D
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Showing a large Two Cyl. Compound, Vertical Enclosed, Forced Lubrication Steam Engine of 300 k.w. capacity, built and installed by us for THE ONTARIO MALLEABLE IRON CO., at OSHAWA, ONT.

G. & McC. Co. Vertical Steam Engines

have been installed in over Fifty Canadian Power Plants in less than three years which speaks well for the reception given this engine by the Engineering Profession and manufacturers in general. They are giving excellent service to their owners.

These Engines are fully illustrated and described in our New Catalogue No. 34, a copy of which is yours for the asking.

The Goldie & McCulloch Co., Limited

HEAD OFFICE AND WORKS
GALT, ONTARIO, CANADA

TORONTO OFFICE:
Suite 1101-2,
Traders Bank Bld'g.

WESTERN BRANCH:
248 McDermott Ave.,
Winnipeg, Man.

QUEBEC AGENTS:
Ross & Greig,
412 St. James St.
Montreal, Que.

BRITISH COLUMBIA AGENTS:
Robt. Hamilton & Co.,
Vancouver, B.C.

BOILERS



STANDARD RETURN TUBULAR BOILER

We make boilers of all kinds for any service.

We are also sole Canadian makers of Erie City Water Tube Boilers, Vertical and Horizontal.

The large number of pleased and satisfied owners of "INGLIS" Boilers is our best advertisement.

For (52) fifty-two years our boilers have been the standard. We have installations of our different types of boilers, which our representatives will be pleased to show to prospective purchasers. Write us for prices, etc.

INGLIS' PRODUCTS ARE "MADE-IN-CANADA"

The John Inglis Company, Limited

ENGINEERS AND BOILERMAKERS

14 Strachan Avenue

Toronto, Canada

MONTREAL OFFICE :
509 Canadian Express Building

Ottawa Representative :
J. W. ANDERSON, 7 Bank Street Chambers



USMC

In this factory the following most up-to-date Shoe Machinery is built for every department from Lasting to Finishing:

Goodyear Welt and Turn Systems; Consolidated Hand Method Lasting Machines; Rapid Standard Screw Machines; Davey Horn Pegging Machines; Model C Ideal Clicking Machines; Heel Protector Driving; Heel Compressing, Loading and Attaching Machines; Heel Trimming, Breasting, Scouring and Finishing Machines; Loose Nailing and Slugging Machines; Cementing, Buffing and Skiving Machines; Gem Insole Machines; Eyeletting Machines, etc.

United Shoe Machinery Co. of Canada

TORONTO

MONTREAL

QUEBEC

BUILD KAHN SYSTEM

REINFORCED CONCRETE FIREPROOF, MAXIMUM DAYLIGHT



Frost and Winters, Contractors

McCormick Manufacturing Co., London, Ont.

Watt and Blackwell, Architects

Entire construction Kahn System Reinforced Concrete.
All windows Kahn Steel Sash.

Kahn Products Embrace :

KAHN BARS RIB BARS RIB METAL HYRIB KAHN LATH

Kahn Steel Sash Ideal for Factories, Warehouses, Powerhouses, Etc.,
being Fireproof, Waterproof and Durable.

Write for Descriptive Catalogues



Trussed Concrete Steel Co. Canada, Limited

HEAD OFFICE AND WORKS: WALKERVILLE, ONT.

BRANCHES:

Montreal

Toronto

Winnipeg

Calgary

Vancouver



Polson Iron Works Limited TORONTO

STEEL SHIPBUILDERS ENGINEERS AND BOILERMAKERS

Steamers: All sizes, Tugs, Barges, Lighters and large size Steam Yachts.

Dredges: Hydraulic, Dipper and Clam Shell Types

Steel Dump Scows

Our yards are fully equipped for building hulls and machinery for the largest sized inland water vessels.

Engines and Boilers for stationary and marine work, all sizes and types.

TANK WORK, SMOKE FLUES and STACKS,
WATER FLUMES, STAND PIPES and
WATER TOWERS

Water Tube Boilers from 100 to 1,000 H.P.
units.

Repair Work given prompt attention.

WORKS AND OFFICE:
ESPLANADE STREET EAST - TORONTO

To Parties Manufacturing, or Intending to Manufacture, in Canada—

WE are prepared to produce, upon a large scale, articles of metal and wood.

Our facilities are those necessary for the extensive and economical manufacture of the heaviest freight cars and the highest class of passenger cars. These facilities include plants for the manufacture of steel, malleable and grey iron castings—rolled steel and iron products—frogs, switches and track work for electric and steam railways—coil and elliptic springs—forgings—cabinet and other wood work—and all preparatory and finishing adjuncts.

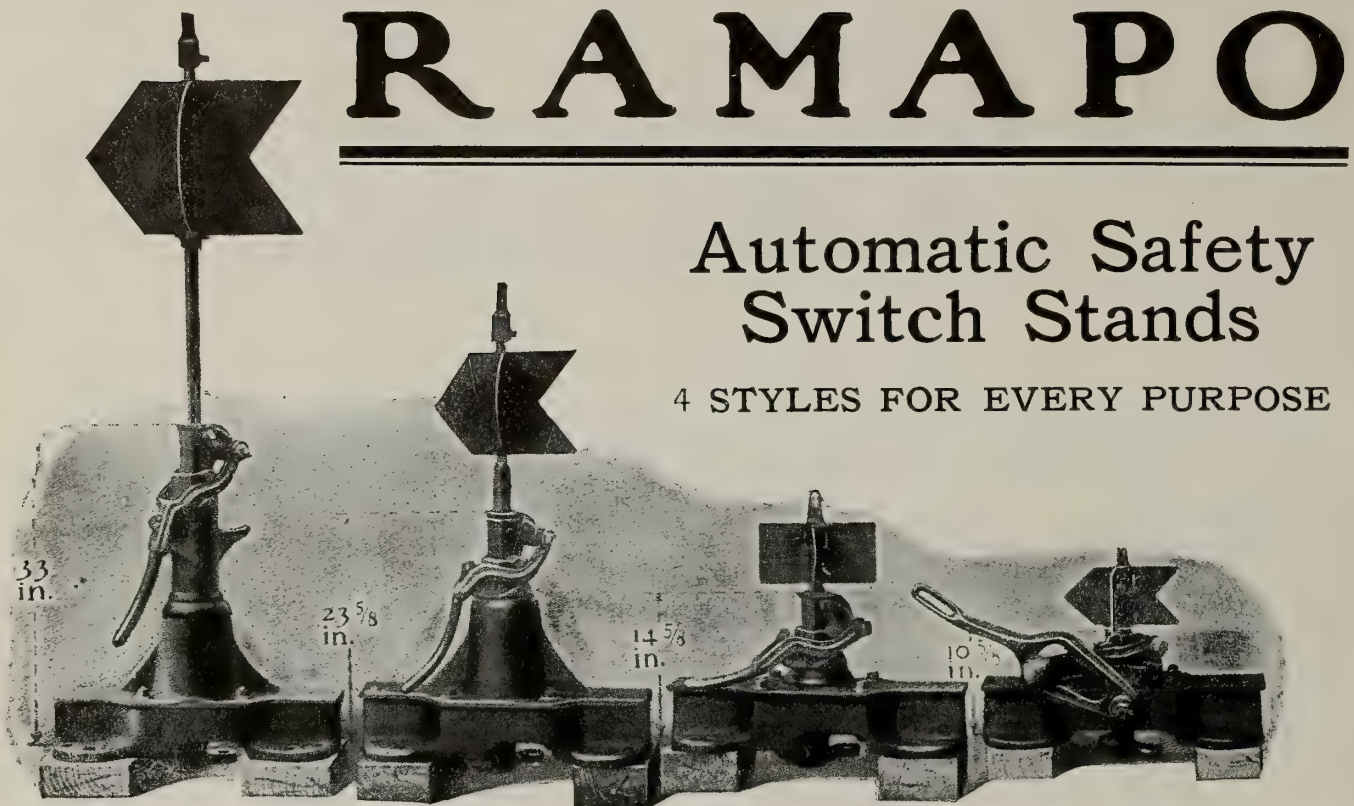
The various plants are distributed from Amherst, N.S., to Fort William, Ont.

Correspondence invited.

Please address Sales Department,

P.O. Box 180, Montreal

Canadian Car & Foundry Company, Limited
Canadian Steel Foundries, Limited
Pratt & Letchworth Company, Limited
Rhodes, Curry Company, Limited



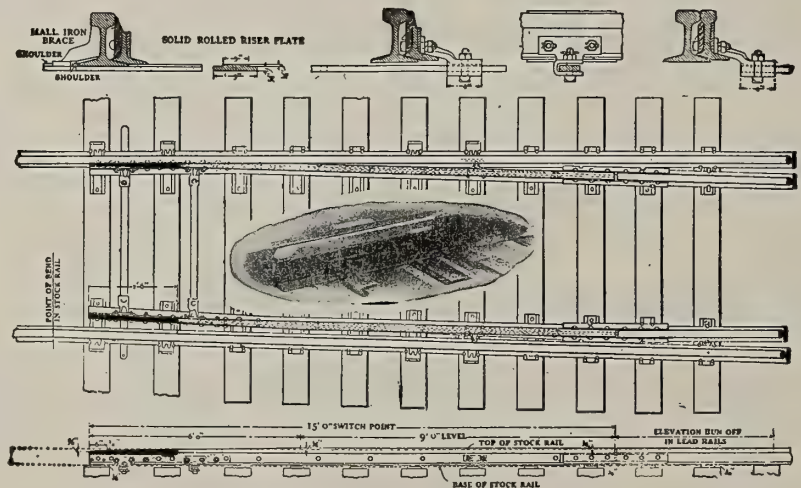
Automatic Safety Switch Stands

4 STYLES FOR EVERY PURPOSE

Railroads should use Ramapo Manganese Pointed Switch Style No. 12

RAMAPO Manganese Frog, Style No. 1.

This Reinforced Manganese Frog will in Hard Service outwear all rail frog Four to Six Times.



RAMAPO MANGANESE POINTED SWITCH. Style No. 12



This is the RAMAPO MANGANESE POINTED SWITCH which will outwear SIX to TEN ordinary all rail switch points. Try it somewhere in the hardest place you know of.

CANADIAN RAMAPO IRON WORKS
NIAGARA FALLS, CANADA LIMITED

Canadian Furnace Co.

LIMITED

PORT COLBORNE, ONT.

MANUFACTURERS OF PIG IRON

BRAND "VICTORIA"

"VICTORIA" FOUNDRY IRON

STRONG—SOFT—NEUTRAL

"VICTORIA" SCOTCH IRON

VERY FLUID—WITH PHOSPHORUS 1 TO 1½%

"VICTORIA" MALLEABLE IRON

FURNISHED TO ALL STANDARD ANALYSES

SOLE SALES AGENTS:

M. A. HANNA & CO.

Cleveland, Ohio.

BUFFALO, N.Y.

PITTSBURG, PA.

DETROIT, MICH.

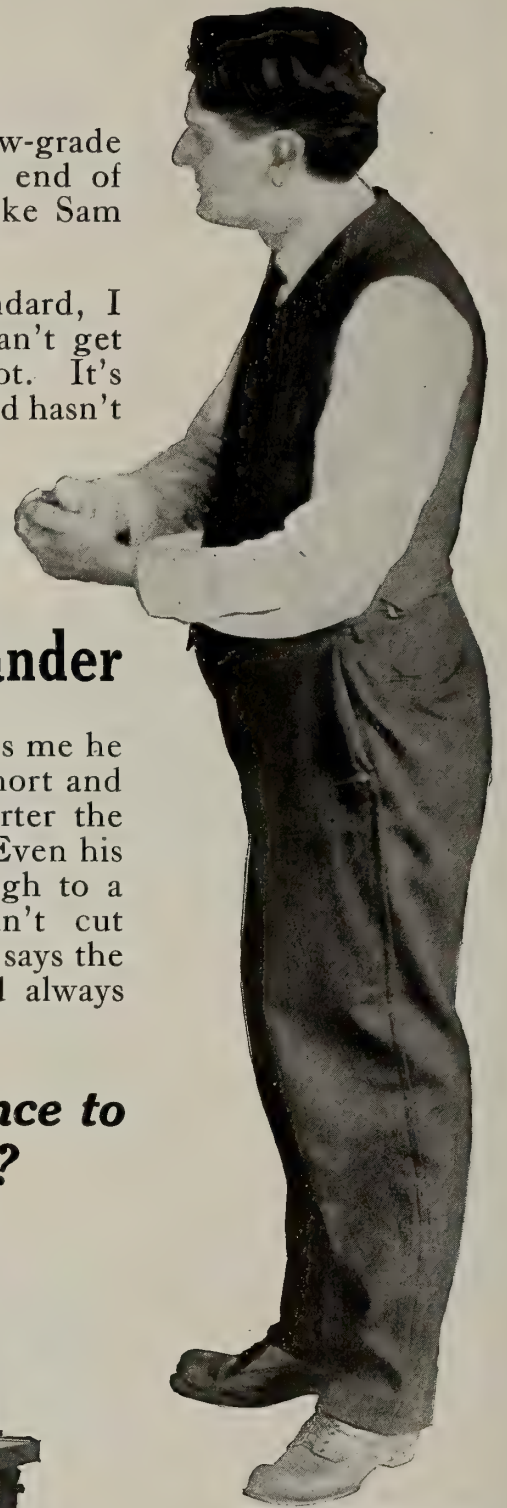


John!—

"We can't stand for more of this low-grade sanding," says the Supt. "There's no end of kicks on our finish, and its costing like Sam Hill too."

"The stuff does not measure up to standard, I know," says the operator, "but you can't get better service from the machine I've got. It's too worn to hold a close adjustment and hasn't half the capacity of the new modern machines."

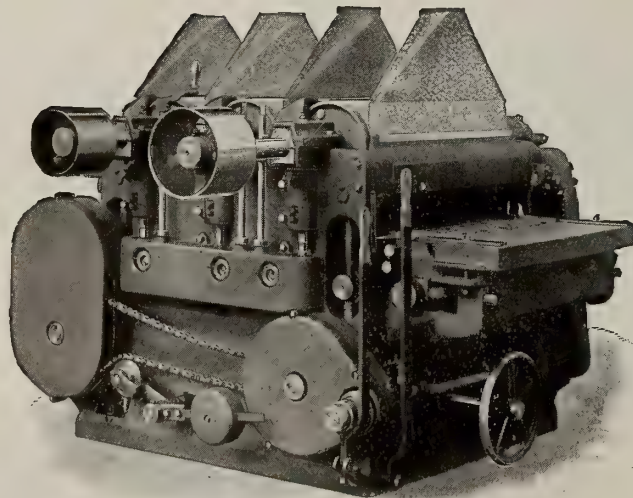
"Murray, over at Chapman's running a



Berlin Endless-Bed Sander

And the finish he gets shines. He tells me he has a cinch hopper feeding all their short and medium stock in dozen lots—in a quarter the time and cost their old method took. Even his wide thin veneers and panels go through to a perfect finish, because the grit can't cut deeper in one place than another. He says the slight 'give' to the rubber-faced bed always takes care of that."

Will you give us the chance to prove Murray right?



Every inch of bed surface yields returns on your investment. Larger output is assured.

Adjustments to 1-1000th inch and absolute rigidity of construction provide lasting accuracy. Sanding quality is maintained.

Berlin Machine Works, Limited, Hamilton, Ont.

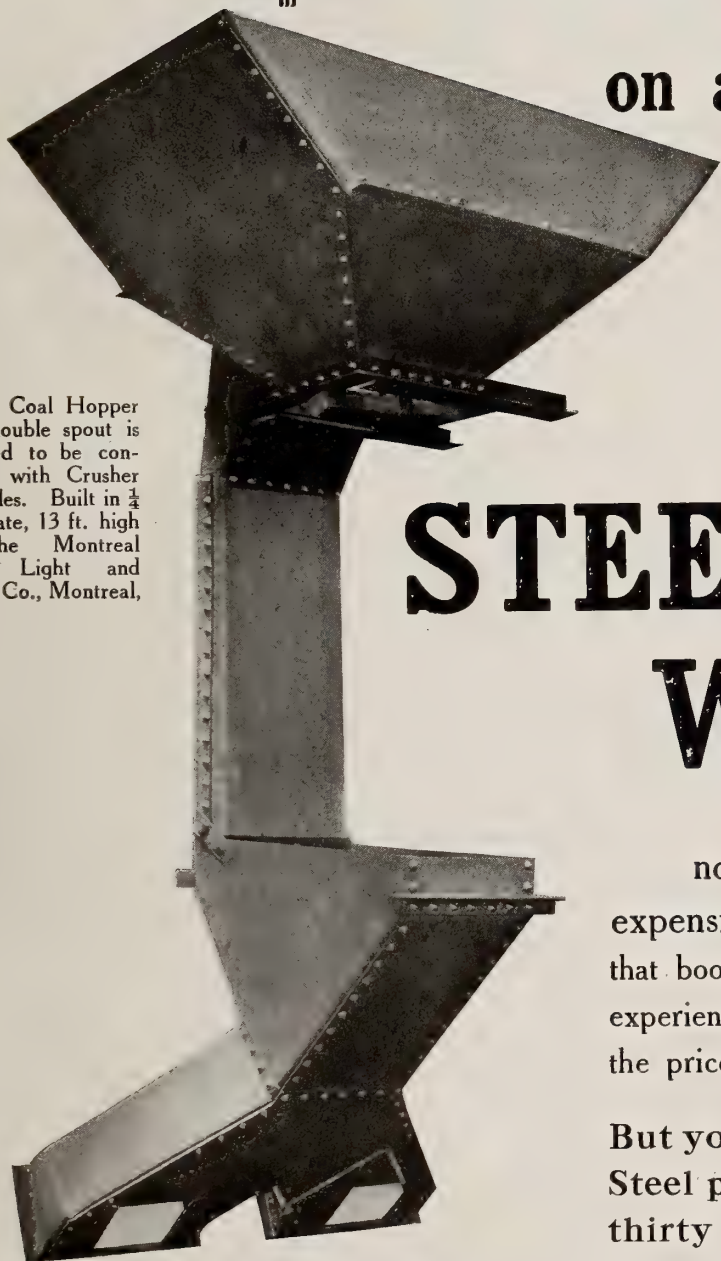
Largest Manufacturers of Wood-working Machinery in the World

U.S. PLANT WITH OFFICES : : : : : : : : : : BELOIT, WISCONSIN

**You Could Get a Dozen Prices
on a Job Like This**

*--And They'd All
Seem High*

This Coal Hopper with double spout is arranged to be connected with Crusher or Scales. Built in $\frac{1}{4}$ inch plate, 13 ft. high for the Montreal Heat, Light and Power Co., Montreal, Que.



STEEL PLATE WORK—

no matter where you buy it is a pretty expensive proposition at best. It is labor cost that boosts the price on this work. And the less experience brought to bear on the job, the bigger the price.

But you needn't pay more money for your Steel plate jobs than is right. We've had thirty years' experience building Steel Plate Work. We know how to turn out your work, built better and for less money than you can buy it anywhere else.

WE BUILD

STEEL STACKS
STEEL BINS
STEEL TANKS
AIR RECEIVERS
PRESSURE
TANKS
BREECHINGS
COAL CHUTES
CONVEYORS
STEEL PIPING
EVERYTHING
IN
PLATE WORK

*Send us your sketches and our
quotations and the finished job
will prove it to you.*

The Waterous Engine Works Co., Ltd.

Brantford, Canada

McClary's

Specialists in

HOTEL AND INSTITUTION KITCHEN APPLIANCES

and Manufacturers of the "FAMOUS" line of Goods including

Coal and Wood
FURNACES

Coal, Gas and Wood
STEEL AND CAST RANGES

Coal, Gas, Wood and Oil
HEATERS

ENAMELWARE, TINWARE AND OTHER KITCHEN WARE

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VANCOUVER

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WINNIPEG

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ST. JOHN, N.B.
CALGARY
EDMONTON

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SASKATOON

Standard Iron Co., Limited

MANUFACTURERS OF

CHARCOAL PIG IRON

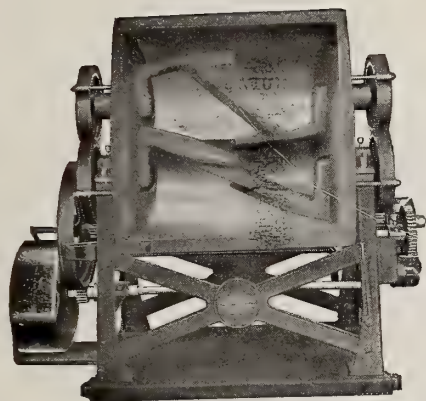
FURNACES

Deseronto and Parry Sound, Ont.

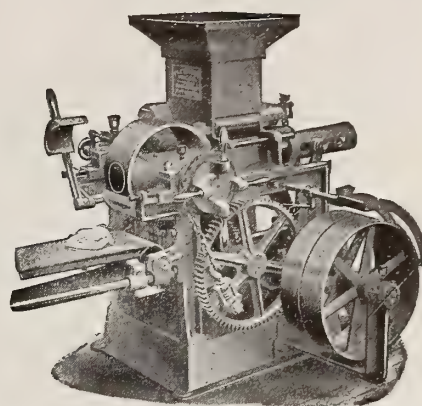
R. J. MERCUR & COMPANY, LIMITED

GENERAL SALES AGENTS

M O N T R E A L



2-ARM MIXER



DOUGH DIVIDER

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FLETCHER

"Made-in-Canada"

Equipment for the

BAKER and CONFECTIONER

comprises the most up-to-date, highest quality goods that can be built. FLETCHER Machinery, Soda Fountains and Appliances are the recognized leaders in quality, efficiency and design. Write for our catalogue and investigate.

**Pasteurizers and
Ice Cream Machinery**

THE FLETCHER MFG. CO., LIMITED

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*Factories at
TORONTO
and
GLENCOE, ONT.*



*Head Office and
Showrooms
29-41 HAYTER ST.
TORONTO, CAN.*

Made in Canada

UNION DRAWN STEEL CO., Limited

HAMILTON, ONTARIO

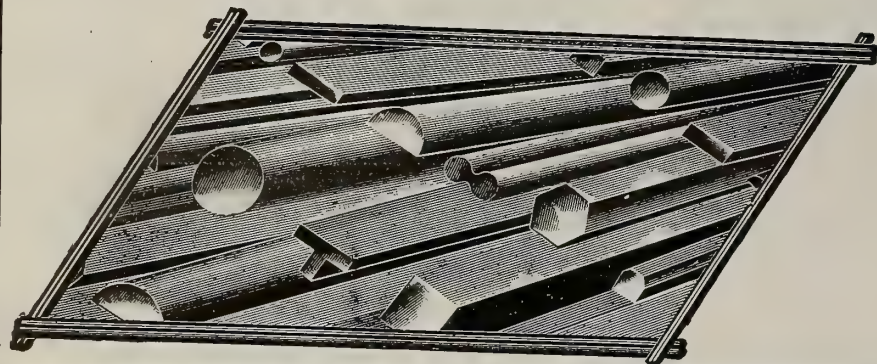
MANUFACTURERS OF

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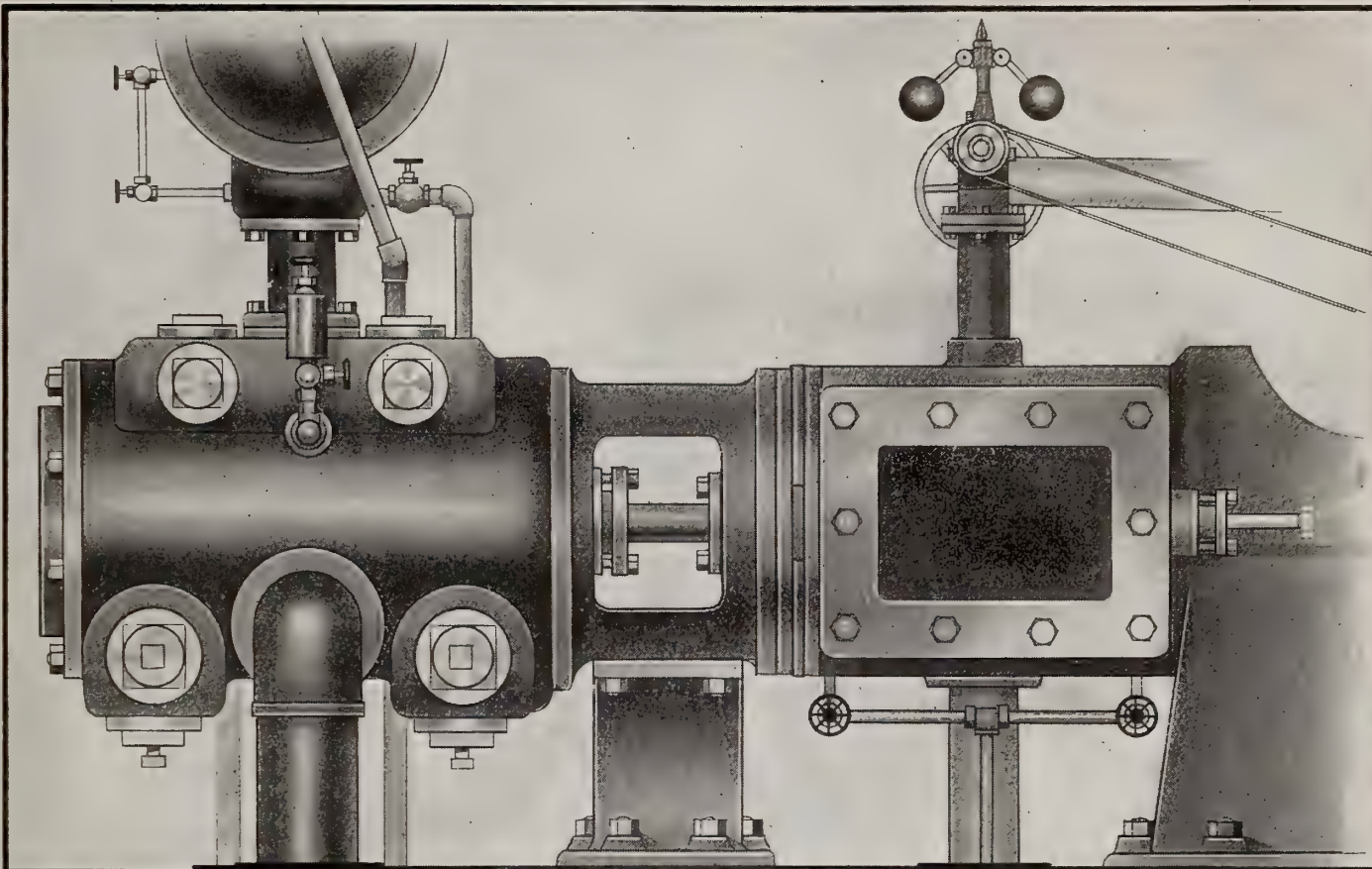
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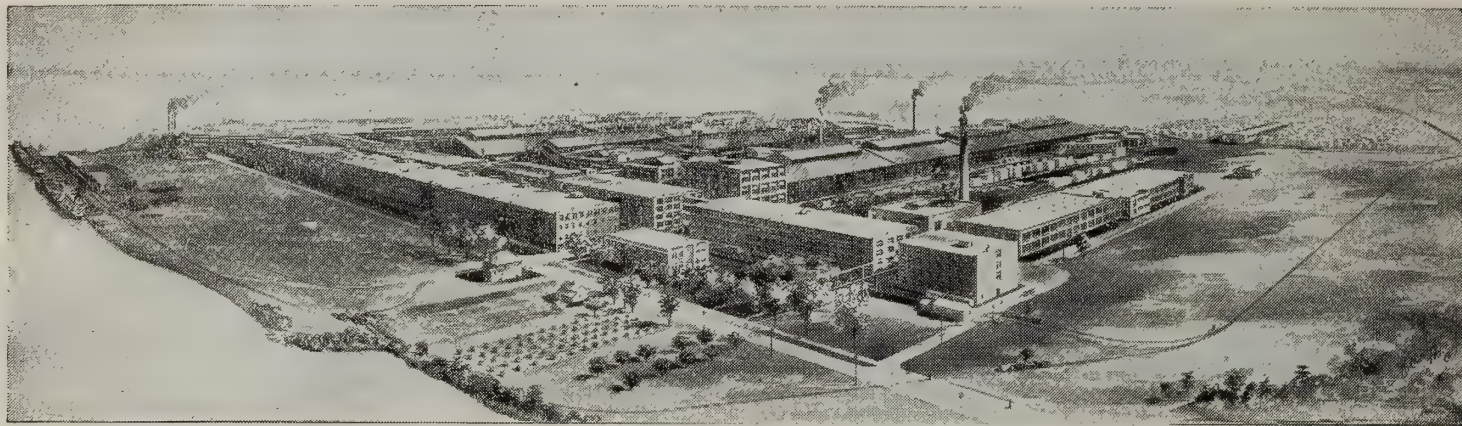
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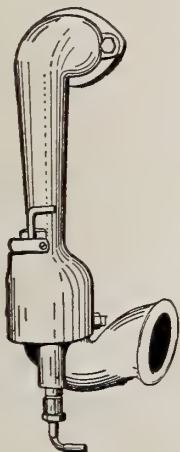
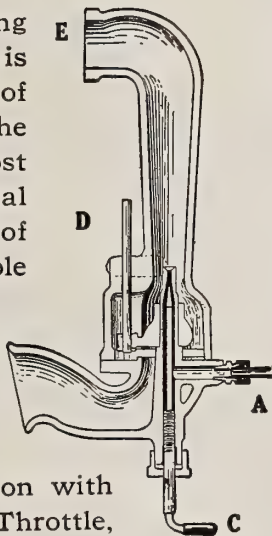
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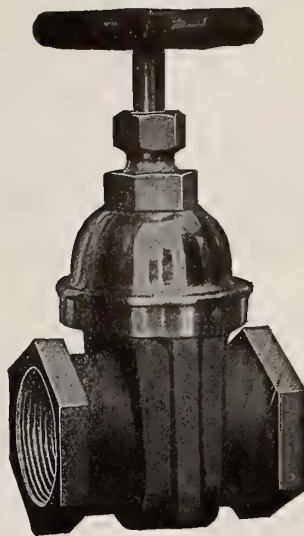
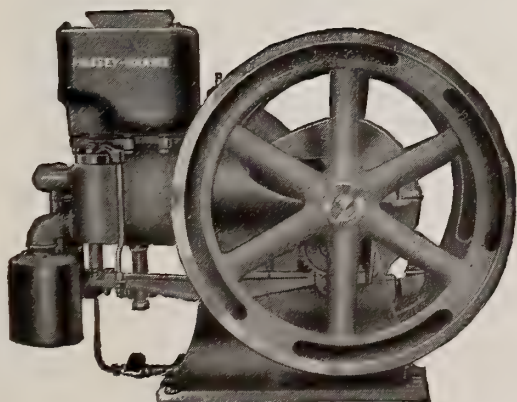
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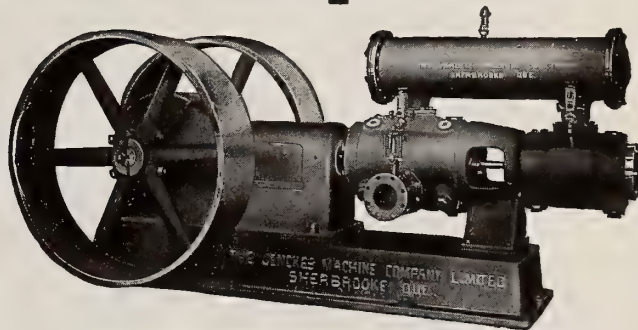
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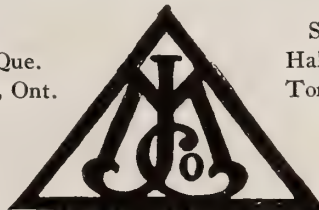
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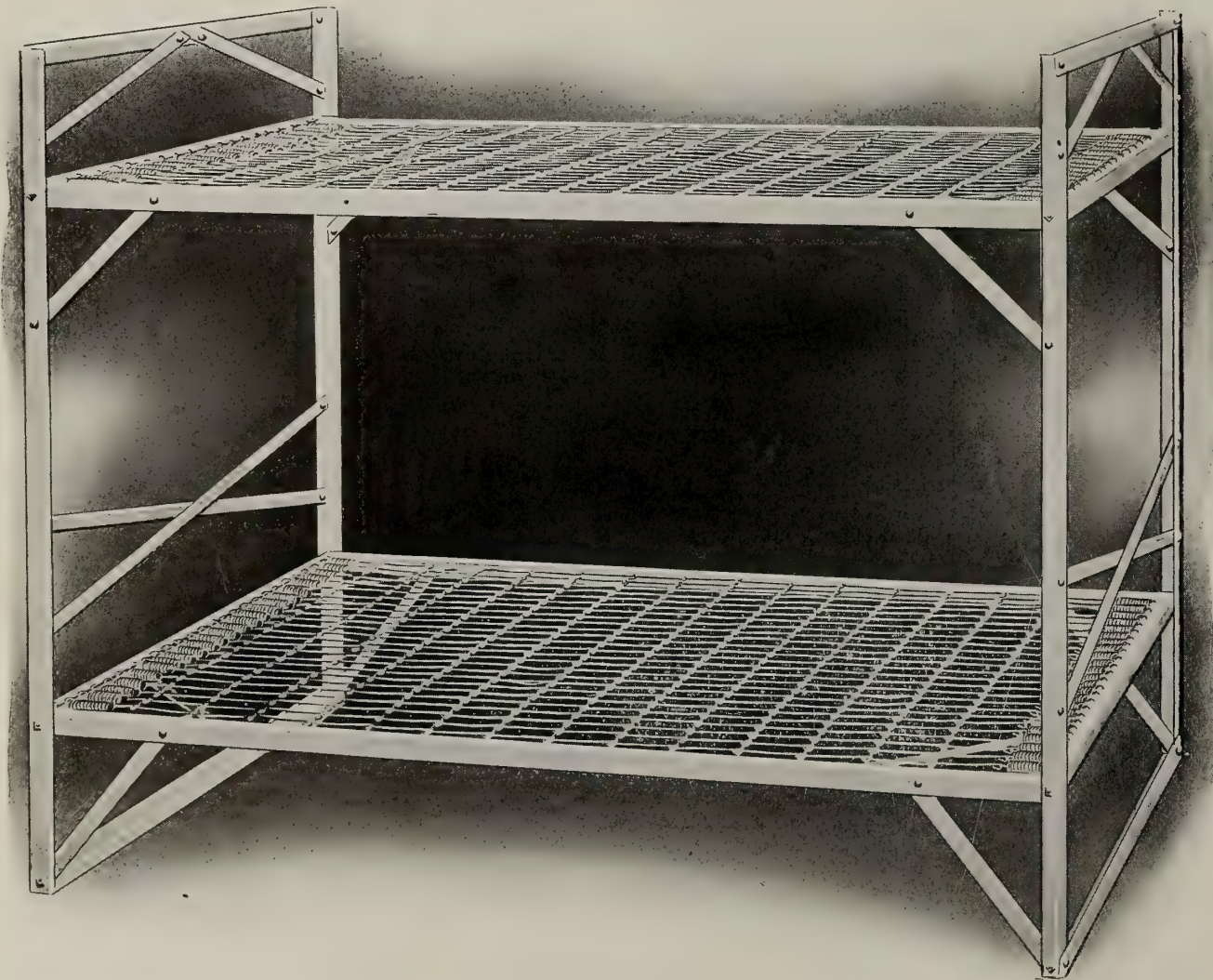


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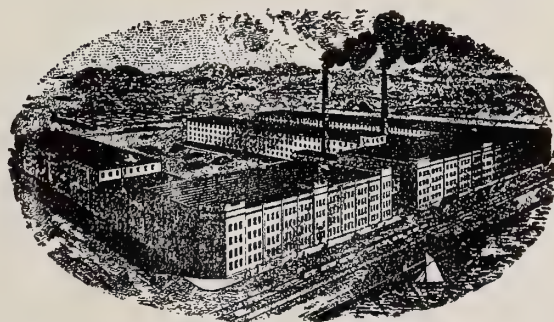
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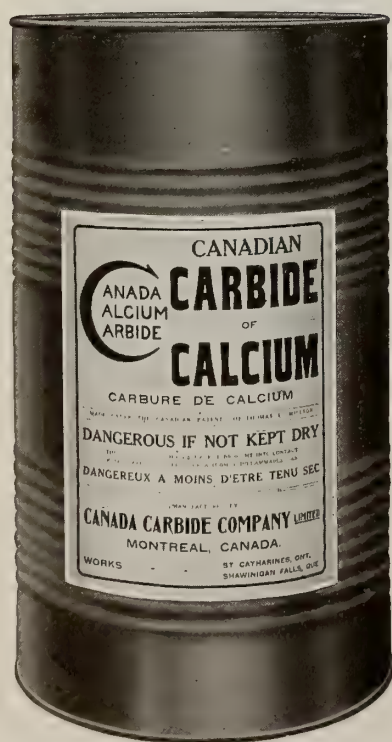
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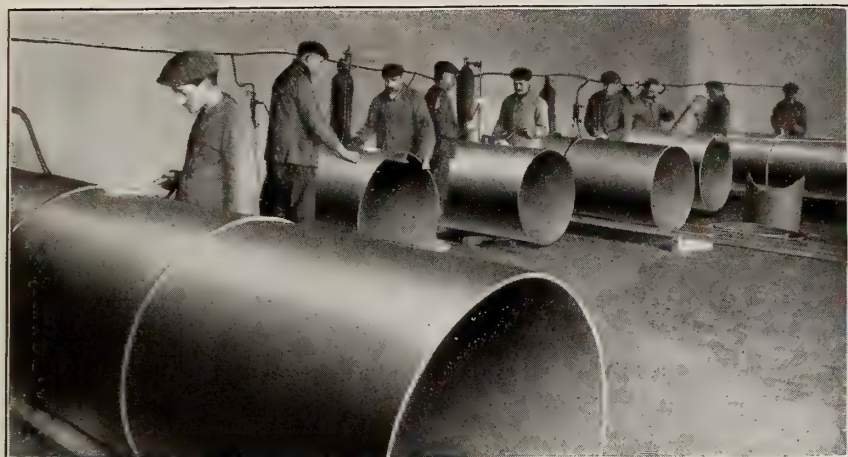
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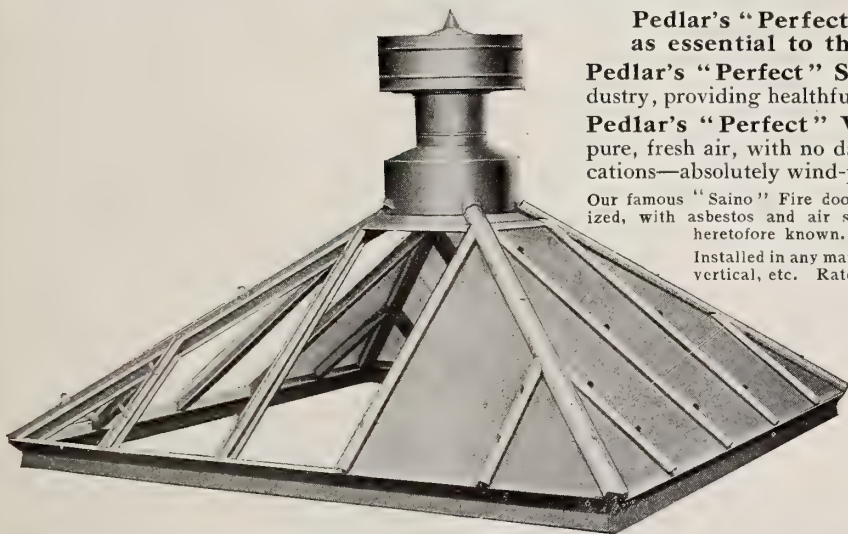
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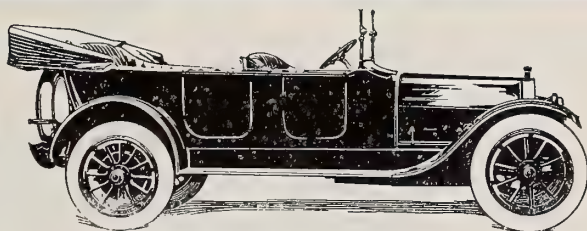
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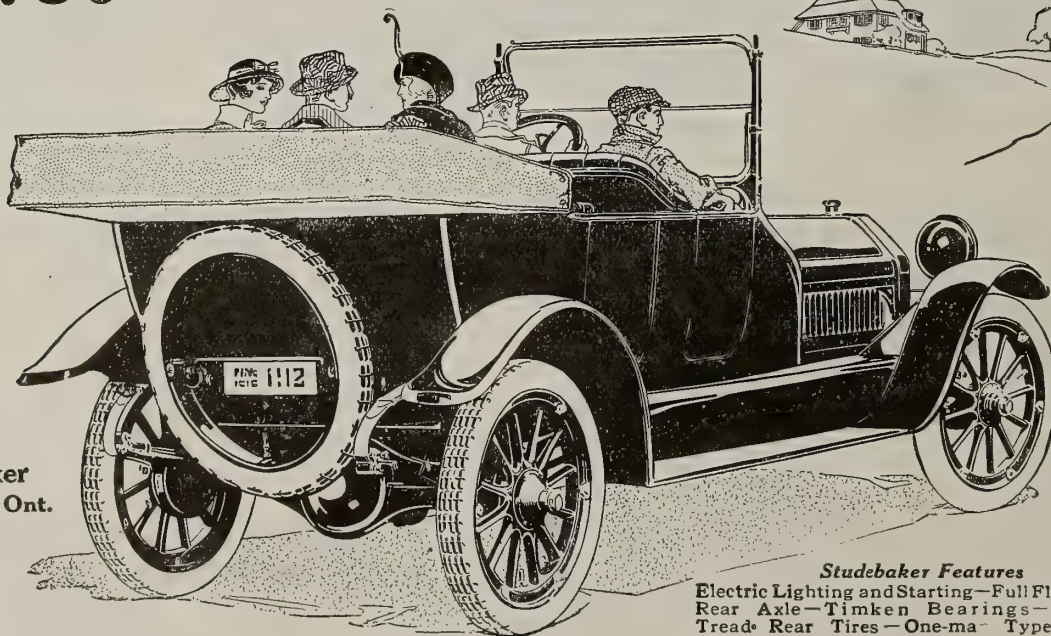
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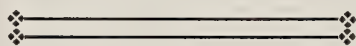
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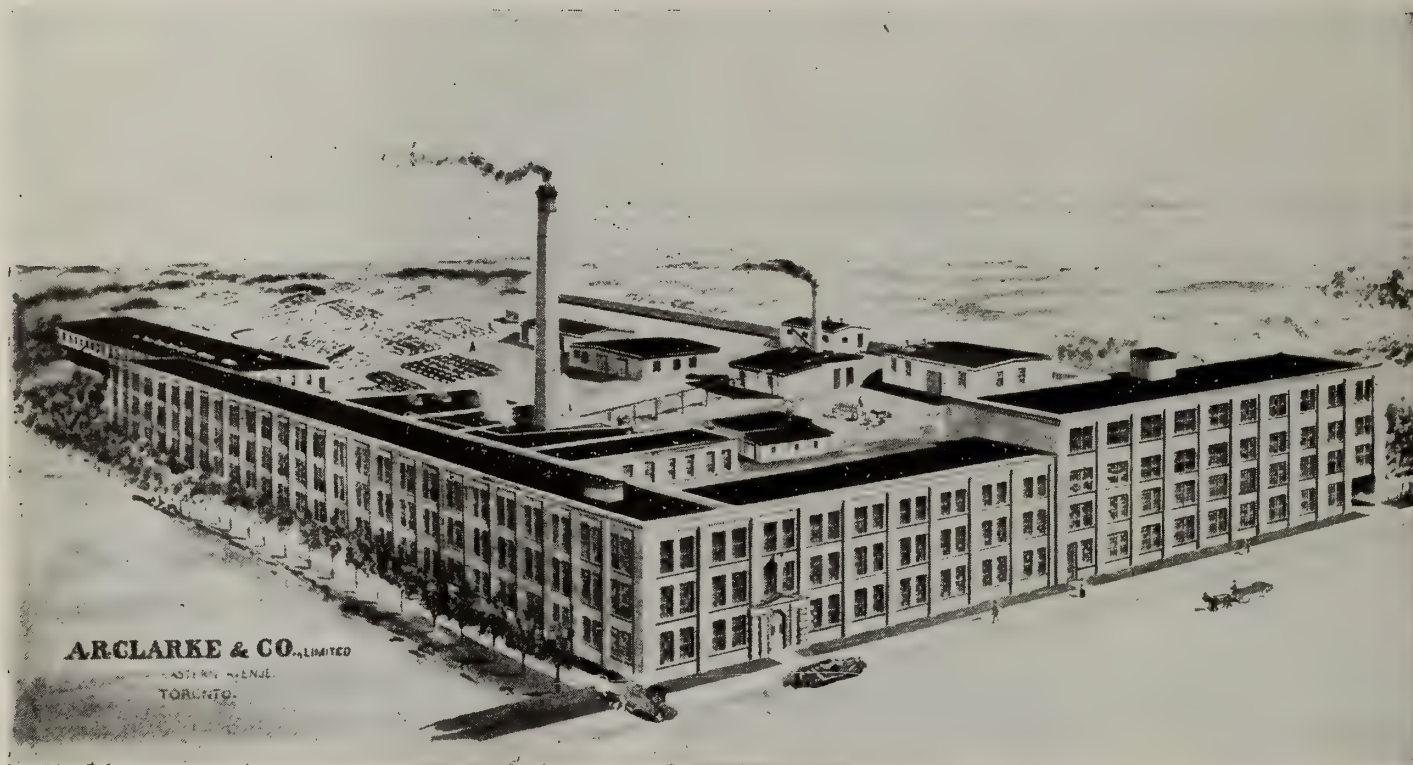
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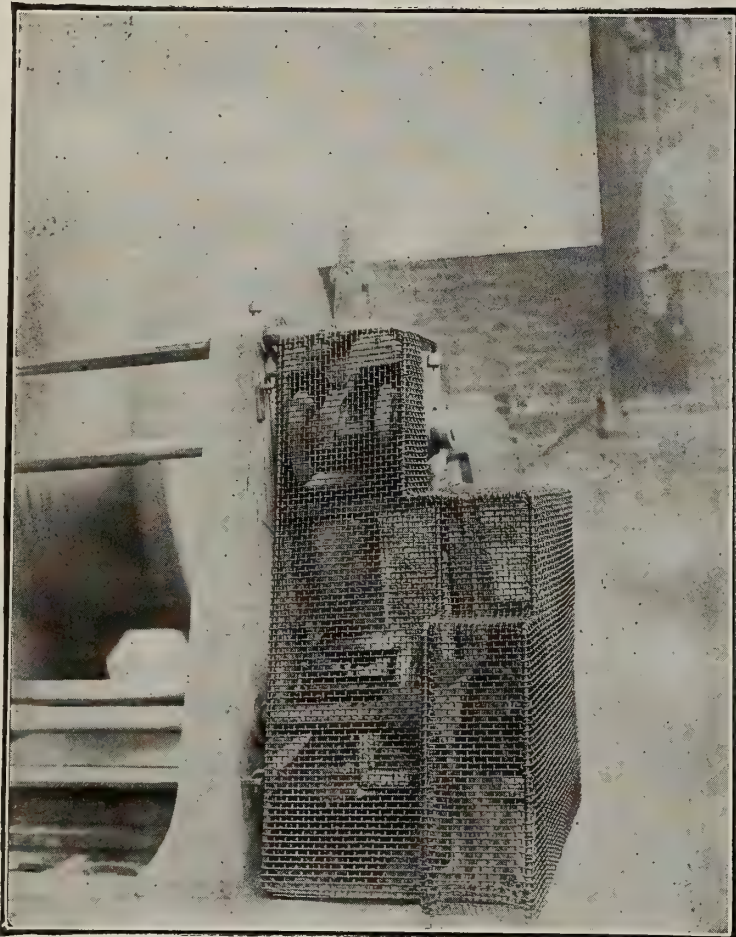
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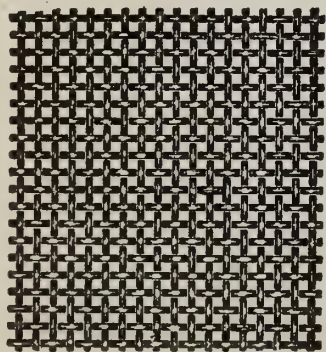
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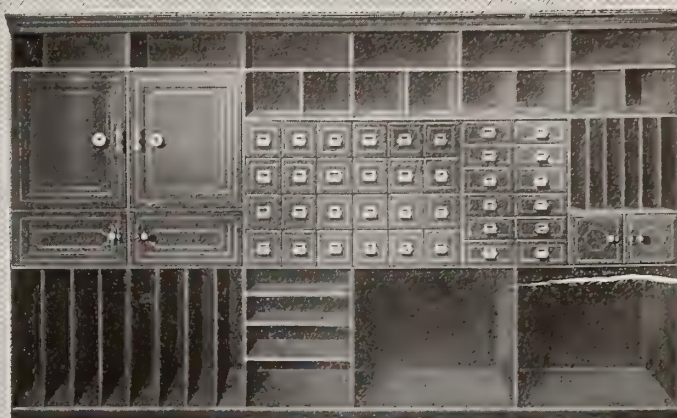
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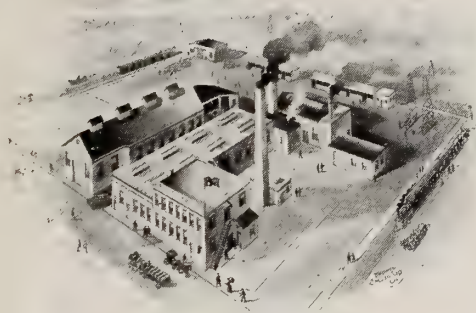
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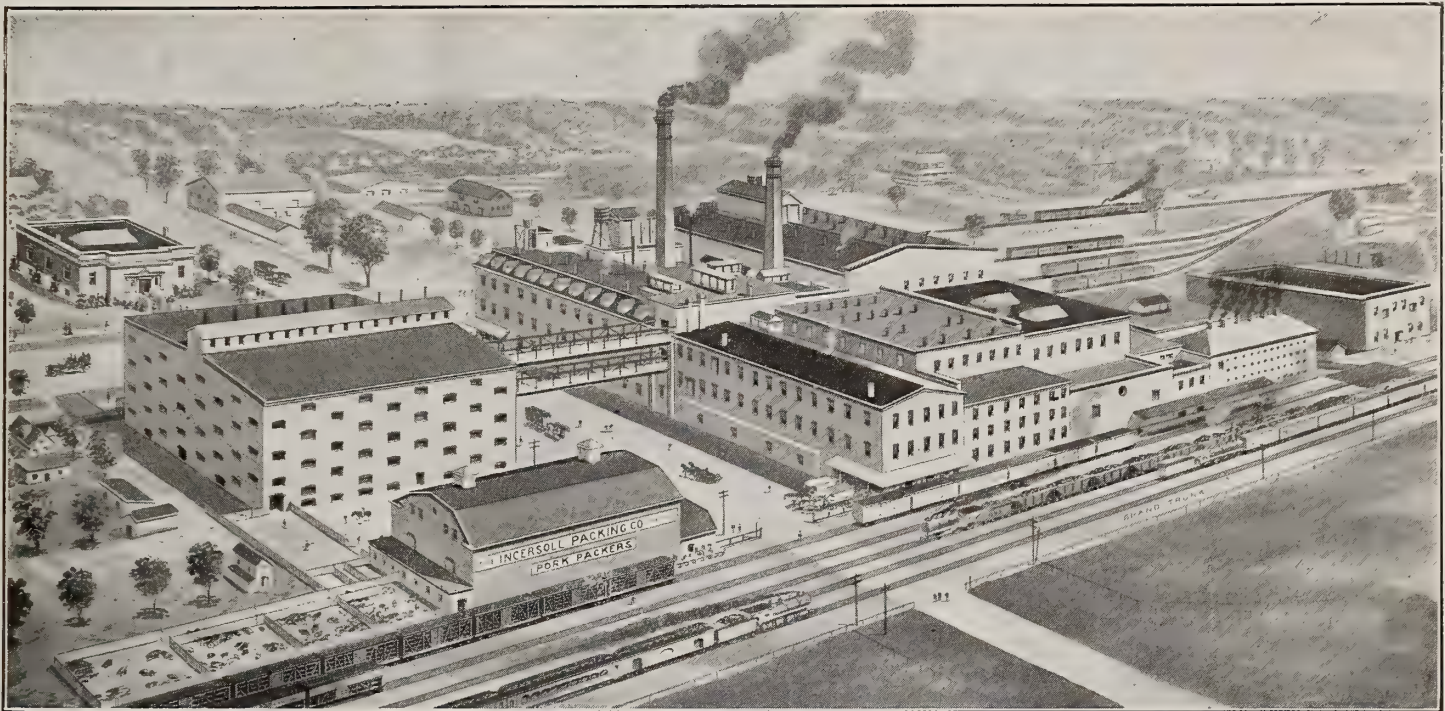


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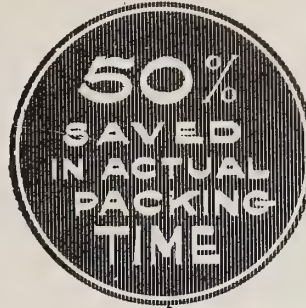
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Made in Canada

BY THE

Martin Corrugated Paper & Box Co., Limited

WHICH IS NOT CONNECTED WITH
ANY FIRM OUTSIDE OF CANADA

The Product is Canadian	The Profits
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The Factory is Canadian	in
The Capital is Canadian	Canada



YOU should use Martin Corrugated Fibre Board Shipping Cases, not only because in buying Canadian made goods you are giving employment to Canadian workmen and helping Canadian industries, all of which contribute to the prosperity of Canada—but also because of the large saving which can be effected in first cost, freight charges, packing time and storage space.

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The cost of wooden boxes is going up. Good grade lumber is getting scarce. Thus you can get Martin Corrugated Paper Boxes for 20 per cent. less than wooden boxes.

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NOTICE

to

Stationary Engineers

Everyone operating a Stationary steam plant of 50 h.p. or over in the Province of Ontario must hold a Certificate from the Stationary Engineers' Board. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary Engineers' Act.

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DUNCAN AND PEARL STREETS,

Toronto, Canada

Manufacturers of—

ALL KINDS OF

PAPER BOXES

Folding and Solid Paper Boxes
for all purposes.

Brass, Phosphor Bronze, Copper and Aluminum Castings

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We have the largest Jobbing Brass
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Can Make Prompt Delivery

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Tallman's Reputation is in the Goods

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SPECIFY
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Makers in Canada of High Grade Papers

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LARGE VARIETY
BUILDING PAPERS

Can be shipped from stock
on hand at Merritton.—Grey,
Blue, White, Brown, also Haw-
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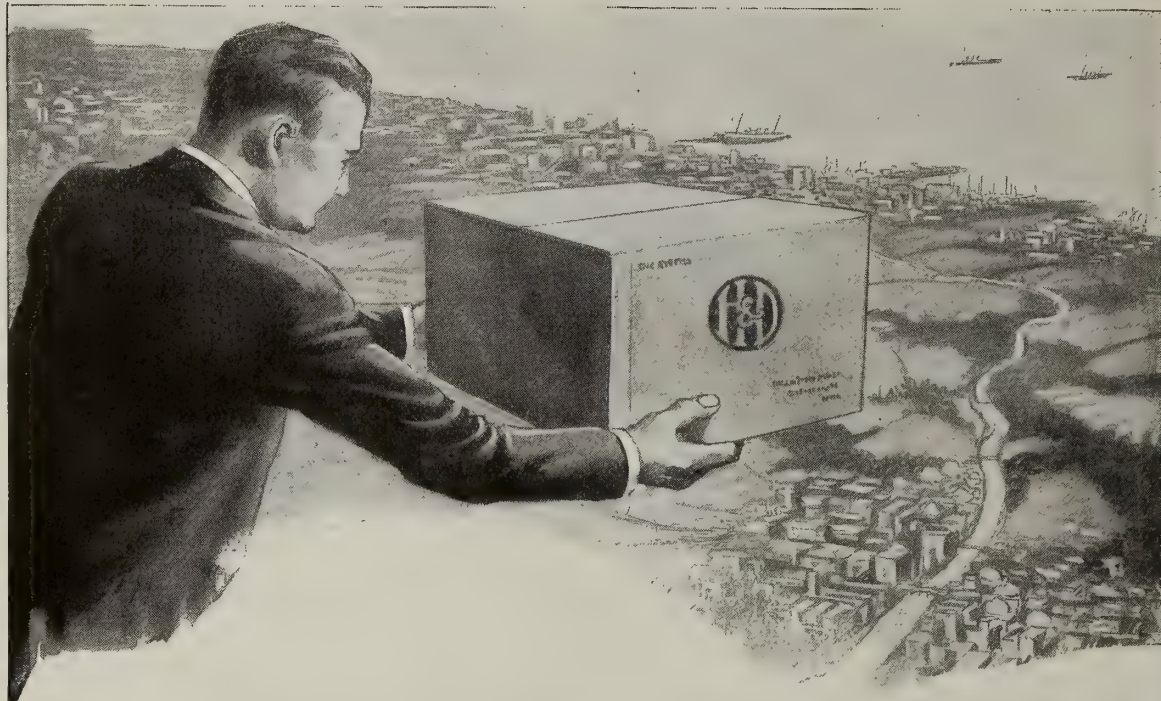
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Extend Your Trade Into New Markets

Ship further—at less cost. Build new trade in new fields with this low-cost, light-weight corrugated fibre board box. With European competition shut down Canadian business is now going ahead rapidly, meeting new demands, extending into new markets. In your fight for business you can save money, reduce damage charges and give greater satisfaction to both old and new customers by using

Hinde & Dauch Corrugated Fibre Board Boxes

H. & D. Boxes will save on your transportation charges, save your floor space, cut down packing expenses, and give you a positive protection against loss from damage. Dampness or frost cannot penetrate their dirt-proof, "pilfer-proof" walls.



Grasp this opportunity to clinch new markets—to expand your present market—now. Send us your product to-day. We will pack it in an H. & D. Box designed to fit your needs, and return it without charging you a penny.

"How to Pack It" is more than a mere catalog—it is a practical and valuable treatise on the low-cost way—the H. & D. way of shipping goods, free on request. We manufacture Fibre Boxes and Wall Board.

HINDE & DAUCH PAPER CO. OF CANADA, LIMITED, 43 Hanna Ave., TORONTO, ONT.

MOLONEY TRANSFORMERS

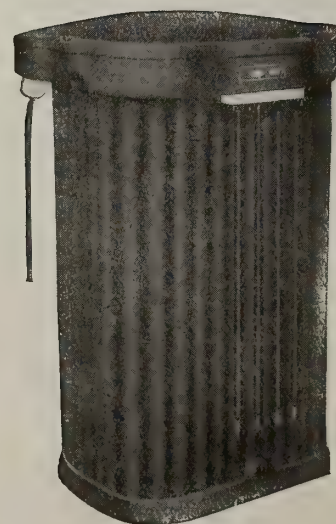


Are manufactured for all

Electrical
Purposes

Any Size, Frequency,
or Voltage

MADE IN CANADA



Moloney Electric Company of Canada, LIMITED
WINDSOR, ONT.

General Sales Office, - - Traders Bank Building, Toronto
HALIFAX MONTREAL WINNIPEG VANCOUVER

made in Canada

-as a Canadian Manufacturer

The Northern Electric Company predominates in the making of wires and cables, and Telephone and Fire Alarm Equipment of all kinds. Its plant and personnel are truly typical of the high standards which support the "Made-in-Canada" platform.

Canadians know this company as "THE MAKERS OF THE NATION'S TELEPHONES." All the big private and Government-owned operating telephone companies use our Telephone Equipment; most use it exclusively. The Big railroads—the C.P.R., G.T.R., I.C.R., G.T.P., and T. & N.O., use N.E. Telephones for train despatching. The Government uses it extensively for military and forestry work.

Every kind of wire and cable for electric transmission is made, from magnet wire, finer than a strand of hair, to high-tension, lead-covered cables three inches in diameter for power and telephone work.

The enormous increase in this branch of the company's business has necessitated the erection of a new plant at Montreal, which is the largest single plant in America for the exclusive manufacture of wires and cables.

That we turn out the most reliable fire alarm equipment is best evidenced by the fact that Northern Electric-Gamewell apparatus is specified and used by cities, towns, and villages in the Dominion that are equipped with fire or police alarm apparatus. This in spite of active foreign competition. With the record of its unparalleled performance under all conditions of weather, you are more than justified in giving Northern Electric-Gamewell equipment your unqualified support.

In the design and manufacture of power switchboards it is our aim to cater to each customer's individual requirements. Each switchboard embodies the most careful and exacting workmanship along lines laid down by engineers well versed in the correct principles of switchboard design.

The rapid growth of this department since we commenced manufacturing for other than our own equipment, is conclusive evidence that eventually our switchboards will be universally specified.

Branch Houses at

HALIFAX
MONTREAL
TORONTO

WINNIPEG
REGINA
CALGARY

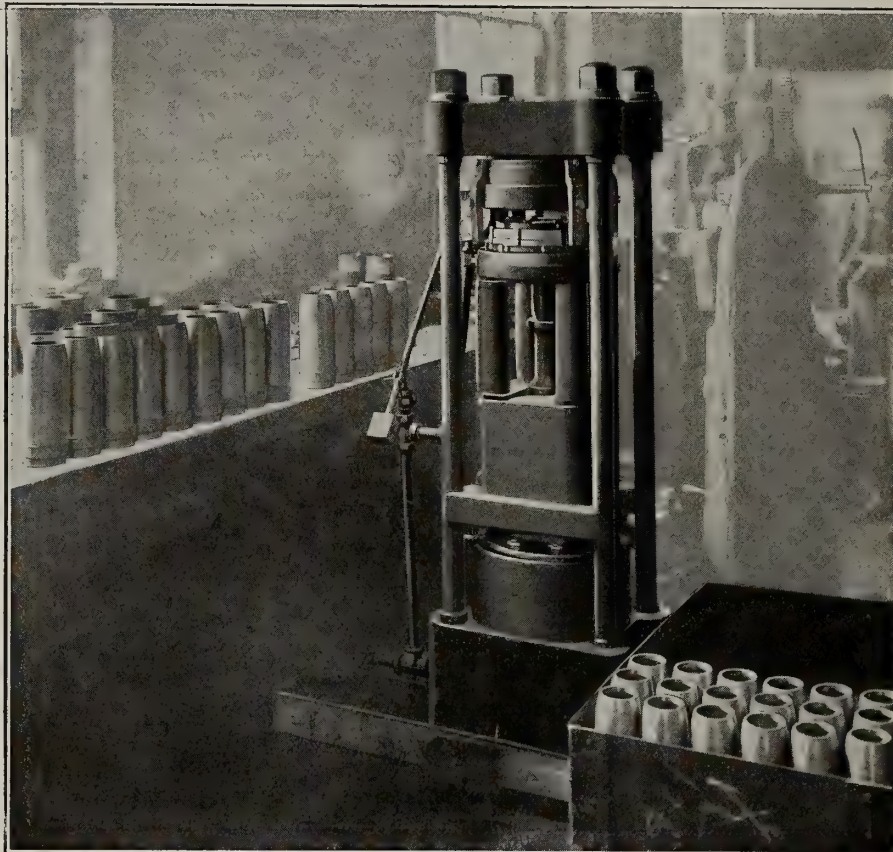
EDMONTON
VANCOUVER
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Northern Electric Company Limited

Equipment for the Manufacture of Shrapnel Shells

To handle shrapnel shells or any other product requiring numerous operations—

Efficiently
a **UNIVERSAL**
ELEVATING TRUCK
is **Indispensable**



SOME USERS:

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Canadian Fairbanks, Ltd.
National Steel Car Co., Ltd.
Ross Rifle Co.

Canadian Car & Foundry Co., Ltd.
Collingwood Shipbuilding Co., Ltd.
Holden, Morgan Co.
Dickson Bridge Works
Eastern Steel Co.
Canadian Billings Spencer
Toronto Laundry Machine Co., Ltd.
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No time is wasted loading and unloading truck. All material is stacked on platform, and when it is to be moved the truck is backed under the platform, and with the locking button depressed, the handle is pushed down. This raises the truck body and with it the loaded platform, locking it in the raised position. When hauled to the desired position the button is pressed and the handle raised, lowering the platform to the floor. The Truck is then drawn from underneath and is ready to move another platform.

Truck is fitted with specially designed ball-bearings throughout. Load raised or released with one hand and with *handle in any position*. (A valuable feature when handling truck in crowded space).

We also manufacture presses with attachment for pressing in driving band.

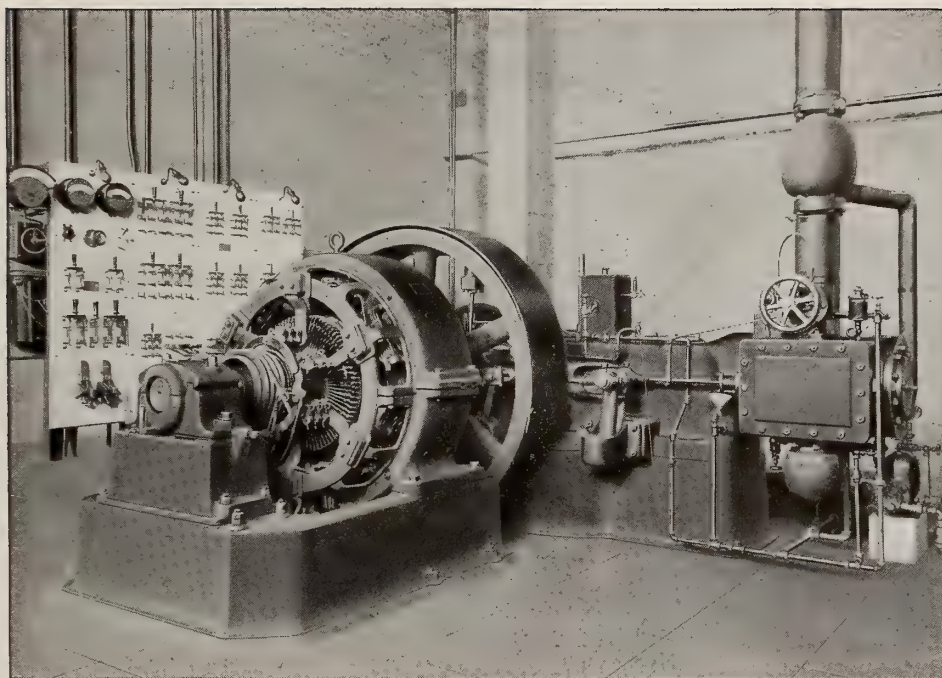
These presses have given entire satisfaction wherever used, and one operator can in one shift turn out 1000 shells. Another commendable feature is the fact that the attachment can be taken from the press at any time and the press used for any other purpose.

We shall be pleased to submit prices and give any particulars required.

THE
Chapman Double Ball-Bearing
Co. of Canada, Limited

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A 75 KW, 125-250 Volt Westinghouse Direct-Current Generator Installation

Westinghouse Direct-Current Generators] For Isolated Power Plants

NOTED for cool running, and for ability to operate without sparking from no load to heavy overloads.

Since there is no sparking, the life of the commutator is practically unlimited.

The open armature and field-coil construction insures cool operation and absence of "hot spots" in the windings.

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Made in Canada



An ideal roadway—

THERE are various forms of Tarvia to satisfy varying road conditions.

For road construction where heavy traffic is expected, we recommend "Tarvia X," a very dense and viscid grade which is capable of forming a matrix in the large voids of new broken stone.

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A tarviated road will resist automobile traffic, will be free of dust and mud, and will need no sprinkling with water.

Booklets free on request.

*Government Parkway, Ottawa, Ont.
Treated with "Tarvia" B.*

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MONTREAL TORONTO WINNIPEG VANCOUVER

THE CARRITTE-PATERSON MANUFACTURING CO., LIMITED
ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

Barrett Specification Roofs

BARRETT Specification Roofs are so generally used on manufacturing plants that specifying this type may truthfully be described as "standard practice" among first-class architects and engineers.

Such roofs will usually last twenty years without maintenance cost of any kind.

Sometimes they last up to thirty years.

They invariably show a lower unit-cost (that is, cost per foot per year of service) than any other roof covering known. Barrett Specification Roofs also take the base rate of fire insurance, because they are recognized as non-inflammable.

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THE CARRITTE-PATERSON MANUFACTURING CO., LIMITED
ST. JOHN, N.B. HALIFAX, N.S. SYDNEY, N.S.

INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XVI

TORONTO, JULY, 1915

No. 3

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

SUBSCRIPTION

Two Dollars per Year Single Copies 20 cents

Advertising Rates made known on application

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The Convention.

THE Annual Convention of the Canadian Manufacturers Association, which was held in Toronto on June 8, 9 and 10, was different from previous conventions.

There has been of late a tendency, slight but increasing, on the part of a great many manufacturers to assume that the affairs of the Association were in good hands and that therefore their interest and co-operation could be safely restricted to the payment of fees and the use of the Departments. This attitude was partly due to the prevalence of prosperity. War and adversity have combined to line up all manufacturers shoulder to shoulder. They feel the need of co-operation, discussion and study in the face of new and trying conditions. Consequently, the sessions of this convention were what they should be, business meetings, where reports were carefully heard, analyzed and discussed by men who felt that their conclusions and the actions arising from these conclusions were of serious moment, not only to themselves, but also to the country. The general attendance was greater than in former years, and the attendance at the sessions was so consistent as to make

it obvious that personal affairs and pleasures were subordinated to the business of the Association.

In the amount of business transacted, in the attendance, in the zeal and activity shown and in organization for the future, there is no doubt that this Convention was by far the most successful in the history of the Association.

Read the Reports.

WHAT the Association has done during the past year and what it proposes to do is set forth in the reports of the various committees and the addresses which appear in this issue. No attempt will be made editorially to summarize this material, because it is compressed now as far as lucidity and the necessity of doing justice to what has been accomplished can be associated with brevity, and also because it is most desirable that these reports and speeches should be read in full by every manufacturer in Canada.

Peruse them, study them, criticize them, and we venture the statement that no manufacturer will fail to find at least something, and probably much, to interest and benefit him. Transportation, tariffs, legislation, education and allied subjects are of greater importance to-day than ever before, and as the Association's usefulness is determined by the collective strength of its members, each individual's responsibility requires an intelligent and a constant interest in and comprehension of the policies advocated and the work performed.

The officers of the Association and the members of the committees have given a greater amount of time and consideration than ever this year to the work described in the reports, and have attended a large number of meetings, travelling from all parts of Canada at their own expense and at considerable inconvenience to themselves.

Those who have not been called upon to perform this active service can also serve by familiarizing themselves with the problems which have been solved, and with the questions which are now under consideration. This much is at least due to the manufacturers who have labored so faithfully in the interests of all.

Are the Factories of Canada Organized?

WHY are not the factories of Canada more fully organized to manufacture munitions of war?

Ten months passed before the factories of the United Kingdom were organized. While it is true that a great many war orders have been placed in the factories of Canada they are still far from utilizing their entire capacity for making all sorts of articles needed by the Allies.

There is little use dwelling on the mistakes of the past except in so far as they spur us on to improve the present and future.

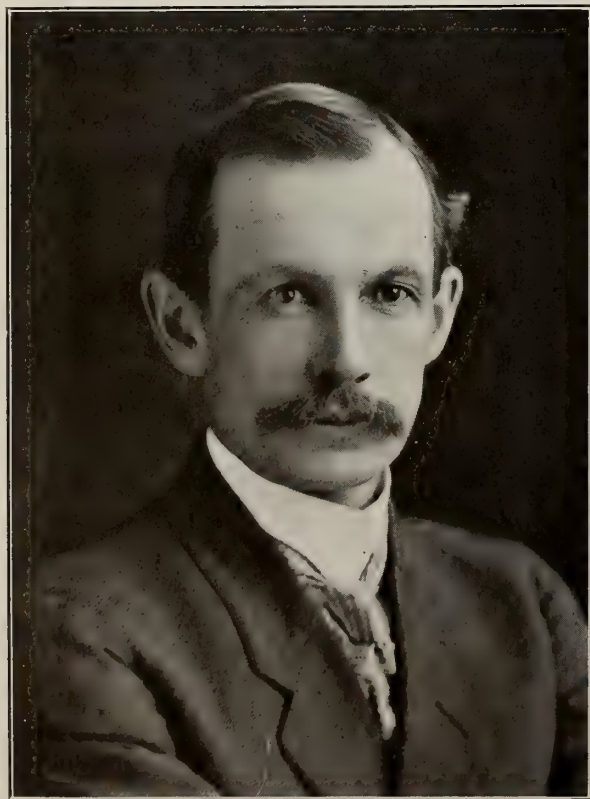
The question is, ARE WE AWAKE NOW?

Since the war started the principal concern of Canadian manufacturers was not whether they could make war munitions but whether they could get the orders. Many, after trying in vain to secure orders, gave up in disgust. Many are still seeking orders without success.

If the Allies are as short of munitions as they claim, **NO FACTORY IN CANADA THAT CAN MAKE THEM SHOULD BE IDLE. INSTEAD OF MANUFACTURERS CHASING WAR ORDERS, WAR ORDERS SHOULD BE CHASING MANUFACTURERS.**

The Late Mr. A. R. Clarke.

WITH the deepest concern and the most heartfelt regret manufacturers throughout Canada heard the announcement of the death of Mr. A. R. Clarke, president of A. R. Clarke & Co., Limited, Toronto. Mr. Clarke was a passenger on the ill-fated *Lusitania*. With hundreds of others he went down with the ship, escaped the suction and debris,



MR. A. R. CLARKE.

came to the surface and floated for several hours, was rescued and proceeded to a London hospital, where he made a brave fight for life before he succumbed.

Mr. Clarke showed interest and activity in the affairs of the Association. He was a member of the Executive Committee and of the Executive Council, and had acted as chairman of the Toronto Branch and as a member of various committees.

It will be difficult to fill his place either in the Association or in the wider affairs of the business world.

"Made-in-Canada" Campaign Endorsed.

THE almost unanimous endorsement given to the "Made-in-Canada" campaign by the Annual Convention showed that the necessity of encouraging consumers to patronize home industry is recognized. Only two voices were raised against the continuation of the propaganda, and of those one was opposed to the principles on which it was being conducted; the other, while sympathetic, counselled delay.

What has been accomplished by the campaign is set forth in the report of the committee, published in this issue. What could be done if more money were subscribed is also indicated. The only regrettable feature about the campaign was the smallness of the fund contributed. Mr. Sadler, of Montreal, in comparing the total amount voted with the wealth controlled by industry, intimated that this contrast would force the people of Canada to conclude that their manufacturers are a poor lot. Mr. Harry Cockshutt, of Brantford, urged a continuation of the campaign, but stated emphatically that it was unfair to expect a few manufacturers to pay for something which benefited all.

A few days ago, the press contained an appeal to the French people to buy goods made in France during the war. The "Made-in-the-U.S.A." movement is in full swing. "Made-in-Germany" made Germany and furnished one of the reasons why Germany is accomplishing those "drives" which were prophesied for the Allies about this time.

Canada will never regain any great degree of prosperity while our huge industrial equipment is only partly used, and it will not be entirely used until our people recognize the folly of sending money out of Canada to buy goods which are well made here.

Hence the necessity for the "Made-in-Canada" campaign. If the manufacturers will not give it adequate financial support, who will?

Farmers Need Manufacturers.

ONE of the most important events of the past year was the sympathetic understanding which was reached between farmers and manufacturers. In discussing this, *Canadian Farm*, a weekly agricultural journal published in Toronto, says:—

"The farmer is not inherently antagonistic to the manufacturing interests. While the basic industry in Canada is agriculture, the one is largely the complement of the other. The farmer is dependent upon the manufacturer for a large share of the equipment necessary to successfully carry on his farming operations. On the other hand, the business of the manufacturer could make little progress without a prosperous farming community and increased production from the land.

"The relations between the farmer and the manufacturer, instead of being antagonistic, should be of the most friendly character. To bring about more friendly relations and greater co-operative effort there must be give and take on both sides."

The Export Association of Canada.

THE letters "P. D. Q.," signifying "Prices reasonable," "Delivery prompt" and "Quality unsurpassed," were announced as the motto of the new Export Association of Canada, Limited, by Mr. F. C. Armstrong, manager, during his address to the Annual Convention, which is published in part elsewhere in this issue. Supplementing the information already furnished to manufacturers, Mr. Armstrong and his assistant, Mr. R. J. Younge, of Montreal, gave a great deal of additional details to those interested in export trade. The new Association is entirely distinct from the Canadian Manufacturers Association, but the two organizations will co-operate where their interests are in common. The Board of Provisional Directors includes Mr. J. H. Sherrard, Mr. C. B. Gordon, and other prominent manufacturers, whose support is a recommendation to other manufacturers. The new Association is not designed to pay dividends and its moderate capitalization of \$100,000 is really a loan from its members which will be repaid by instalments. Its object is to increase our export trade in manufactured articles which possess quality and value worthy of Canadian industry. The desirability of marketing Canadian goods abroad will scarcely be disputed though the practicability of methods may be questioned, and, consequently, this Association, which is formed for the purpose of investigating conditions, and solving difficulties as well as for selling goods on a commission basis, appears to have a wide field for usefulness.

In connection with export trade, we wish to draw the attention of manufacturers to certain facts which have come into our possession in regard to alleged buying agents for firms in other countries, who are trying to get in touch with industrial concerns in this country. We found one case where the agent was repudiated by the firm he claimed to represent. Such examples emphasize the need of an organization like the Export Association of Canada, which will try to safeguard manufacturers against doubtful foreign firms and agents.



HON. COL. THOMAS CANTLEY

General Manager, Nova Scotia Steel & Coal Co., Limited,
New Glasgow, N.S.

Elected First Vice-President Canadian Manufacturers Association

Men connected with iron and steel seem to be playing the chief roles in the affairs of the world at present.

Hon. Col. Cantley has been in the iron and steel trade for the greater part of his life.

When the Shell Committee was organized he was one of the first members chosen, and his knowledge and experience have been invaluable to that body.

The Canadian Manufacturers Association felt that a man with steel and iron in his blood is needed to help direct its affairs in the present international crisis, and elected him First Vice-President at the convention.

It was in 1885 that Col. Cantley accepted his first position with the Nova Scotia Steel and Iron Co., in the capacity of sales agent. He became Assistant Manager in 1898; Joint Manager in 1900; a member of the Board of Directors and General Manager in 1901; and Second Vice-President in 1909.

He has made repeated visits to Europe to investigate iron and steel processes, and helped to install at Sydney Mines the first fluid steel compressed plant in Canada; a feat which was followed by the installation of one of the most modern hydraulic forging plants at New Glasgow.

By inducing Col. Cantley to accept the First Vice-presidency, the C.M.A. has secured the services of one of the most able Canadians, who is certain to conduct its affairs with the same perspicacity and efficiency that have distinguished the transactions of his private career.



The Beautiful Canadian Building, containing the Dominion Government Exhibit at the Panama Pacific International Exposition, San Francisco

THE CANADIAN EXHIBIT AT THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION AT SAN FRANCISCO

A Magnificent Collection of Products and a Credit to Canada

CANADA has become a specialist in the art of devising exhibits at the great fairs of the world.

Since the Centennial Exposition of 1876, we have been represented at all international expositions—the Columbian, Chicago; the Pan-American, Buffalo; the Japanese, Osaka; the Paris Exposition; the Louisiana Purchase, St. Louis; the Liège Exposition; the Milan Exposition; the Dublin Exposition; the Entente Cordiale Exposition, London; the Alaska-Yukon, Seattle; the Brussels Exposition; the Festival of Empire, London, and, lastly, the Ghent Exposition, Belgium.

This year, at San Francisco, according to all accounts, Canada has surpassed previous records. In opening the building, Hon. Martin Burrell, Minister of Agriculture, stated that the object of the exhibit was "To illustrate the character of our natural resources, to portray their development, and to reflect the activities of eight million people."

Canada has a special Exposition staff, which constitutes a permanent branch of the Department of Agriculture. Experts, under the supervision of Commissioner-General William Hutchison, collect and prepare the various exhibits, which are gathered from all parts of the country and become the property of the Government. Our success at international expositions has done much to proclaim the advantages and resources of Canada, and is a most valuable stimulus to immigration.

The Canadian Pavilion at San Francisco, which is shown above, covers an area of 70,000 square feet, and

required 2,000,000 feet of lumber in its construction. The main floor is divided into three halls, 220 feet long and 20, 30 and 40 feet wide, respectively. The halls and ceiling are decorated with red felt, upon which are worked designs in leaves, grasses and grains. A wide frieze with relief work of grasses, leaves and shrubs, depicting Canadian scenes, extends throughout the building. Samples of this work appear on the opposite page.

The exhibits are varied as well as extensive. The water power section illustrates what resources Canada possesses in her waterfalls. The wood pulp industry is shown by processes and samples. Ores take up a considerable section. Fishery subjects lend themselves admirably to treatment, and Canada's riches in this respect are set forth. The fruit section contains all kinds of preserved and raw fruit, and faces a bit of remarkable scenery showing types of Canadian orchards. One of the most interesting corners is that depicting "Past and Present of Canada." It gives at a glance a conception of our wonderful material progress.

One of the most necessary departments is the Information Bureau. This is connected with reception rooms, where visitors can rest, smoke or conduct correspondence. Special attention is directed to the task of answering questions and supplying information about the opportunities for immigration with a view to encouraging United States farmers to come to Canada.

The Exposition Department is to be congratulated on its splendid achievement.



Views of the Canadian Government Exhibit at the Panama-Pacific Exposition, San Francisco
Every Important Department of our National Life is Represented



Cold Storage Plant for Fish at Prince Rupert, B.C.

PRINCE RUPERT: A NEW FISHING PORT

By NORMAN LAMBERT

ON December the tenth, 1914, an Order-in-Council was passed at Ottawa, providing "that for a period of twelve months from the first of January, 1915, foreigners or foreign corporations bringing fresh fish in vessels registered in the United States of America, to any port in British Columbia, shall be permitted to land such fresh fish at such port without payment of duties, and tranship the same in bond to any port in the United States (without the right, however, to sell in Canada any of such fresh fish so landed); and foreigners and foreign corporations bringing fresh fish in vessels registered in the United States of America to any port in British Columbia, shall be permitted to purchase supplies at any port in the said Province of British Columbia, the whole under such regulations and conditions as the Minister of Customs may determine."

No later than the ninth day of March, 1915, the foregoing Order was amended so that the words following "and tranship the same in bond to any port in the United States," would read,— "or to sell such fish in bond to such local dealer or dealers as may be properly and duly licensed therefor, under the regulations and conditions hereinafter mentioned, which dealer or dealers shall export the same in compliance with the bonding requirements (without the right, however, in either instance, to sell in Canada for consumption therein, or otherwise, except in bond, any of such fresh fish as landed): and such foreigners and foreign corporations bringing fresh fish in vessels registered in the United States of America to any port in British Columbia, shall be permitted to purchase supplies, and ship crews for such vessels, at any port in the said Province of British Columbia, the whole under such regulations and conditions as the Minister of Customs may determine."

Without pursuing further the lingo of the official Order-in-Council, with its lengthy preamble, the reason for grant-

ing such privileges to the fishermen of vessels registered in the United States, was to give Prince Rupert and all the interests connected with that new railway terminus, the full benefit of an advantageous geographical position on the Pacific coast. The first Order-in-Council did not go far enough in its scope, giving permission of entry to any British Columbia port, only to large company vessels which could ship their own catches direct, in bond, to the Eastern States market. The second Order-in-Council extended that right of entry to smaller vessels and boats, and at the same time, provided for the selling of their catches to local dealers at the port of entry. Thus, both the foreign company vessel and the foreign independent smaller boat were given equal rights in Canada. The reason for making an amendment in the first Order-in-Council to include the smaller independent boat may be seen in a later paragraph. Suffice it to say, at this juncture, that the Government, in passing such legislation, has given a remarkable stimulus to an industry of great potential richness, off the north coast of British Columbia.

The trade for which Prince Rupert is making such a strong bid is principally in halibut. The wealth of the halibut industry may be partly appreciated by noticing what that trade has meant to Seattle during the past seven years. Seven years ago halibut fishing along the north Pacific coast was in its infancy. At that time Seattle was receiving only the business of some nine halibut ships. Last year 84 independent boats and 12 company boats conducted a trade in halibut at Seattle. The independent boats alone took twenty-two million pounds of that kind of fish into the wharves at Seattle, to be shipped for the greater part to the markets of the Eastern States. The twelve company ships carried thirteen million pounds into the same port, while six million pounds of boxed fish were

also brought to Seattle for local distribution. A total volume of forty-one million pounds of halibut, therefore, was taken out of waters lying at least six hundred miles nearer to Prince Rupert, to a rival American port. The halibut is caught chiefly north of Prince Rupert, the fishermen operating for a thousand miles along the coast right up to the long extended arm of Alaska.

After Independent Boats.

It is worth while explaining that the independent fishing boats, which were considered specially in the second Order-in-Council, have an average capacity of 30,000 pounds of fish, and their capacities range all the way from 5,000 to 100,000 pounds. The company boats, which are under the control of such concerns as the New England Fish Company, for instance, have capacities ranging from 100,000 to 200,000 pounds of fish. There are only some twelve company vessels, however, operating into Seattle, and their connection with that port is naturally more or less permanent, while, on the other hand, eighty-four smaller, but independent, boats, which have been operating in and out of Seattle, are free to go where they like. It is these independent boats especially that Prince Rupert is desirous of attracting to its port. One important consideration, too, in securing the trade of the independent boat, is the necessity of providing supply houses at Prince Rupert equal in quality to those at Seattle. For instance, the Pacific Net and Twine Company, of Seattle, which supplies the fishermen with all sorts of equipment, is a strong connecting link between the smaller independent boat and that port.

But Prince Rupert, in its present condition of comparative wildness and undevelopment, has advantages to offer now to the fishermen of the north Pacific coast which should establish that new town as the leading deep-sea fishing port of the Pacific coast. In the first place, Prince Rupert is from six to seven hundred miles nearer to the fishing grounds of the North Pacific coast than Seattle; which means the saving of at least four days going to, and four days coming from, the port of shipment. Secondly, Prince Rupert has a direct railway connection with Chicago and the large cities of the Eastern States, which enables a trainload of halibut to reach its ultimate market in the east in a very much fresher condition than would be possible by going six or seven hundred miles farther down the coast and shipping from Seattle over American lines. Thirdly, the cost of operation in Canadian waters and in and out of a Canadian port will not be greater than elsewhere for the fishermen, because the Government of Canada has waived the duty on distillate when used for fuel on fishing vessels, this amounting to a subsidy of two



75,000 lbs. of Fish, part of the 111,000 lbs. Cargo landed by S.S. "Geo. E. Foster" at Cold Storage, Prince Rupert, B.C.

and a half cents per gallon consumed. And, fourthly, the accommodation for fishermen at Prince Rupert is rapidly being perfected. The harbor, to start with, is one of Nature's perfect havens, and in addition to that the Grand Trunk Pacific Railway Company, assisted by the town of Prince Rupert, has set aside a definite area on the waterfront just north of the town, and is now building wharves at that point for the use of fishermen and dealers. Already there is in existence at Prince Rupert one of the largest fisheries cold storage in the world. The Canadian Fish and Cold Storage Company, subsidized by the Government to the extent of \$80,000, have built the largest single unit cold storage in North America, having a capacity of 13,600,000 pounds of fish. This was one of the preparations for the future fish trade of Prince Rupert that was completed before the Grand Trunk Pacific had become linked with the Pacific. In brief, the plans that have been devised to make Prince Rupert an important fishing port, may be enumerated as follows:—(1) The Government founded the port; (2) The Government helped to build a railroad to the port, and also assisted a private corporation to construct a cold storage plant to handle the business; (3) The Government waived all customs regulations hampering the port, and (4) The Government, by agreeing to the licensing of dealers at Prince Rupert, arranged for financing the operations of the vessels which were to be attracted there.

The results of this strong bid for the halibut fishing trade of the Pacific coast are in evidence already. They are reflected in the best mirror possible, in the freight records



Herring Fishing at Prince Rupert, B.C.
On the left is shown a Good Catch

of the Grand Trunk Pacific Railway. The G. T. P. opened for traffic through the mountains from Prince Rupert last September. Up till the first of June no more than from two to three trains per week were operated from Prince Rupert to Edmonton, but during that time the following figures will show how the fish traffic from the Pacific to the Eastern States increased:—

By Express (Fresh Fish).

1914—September, 3 cars	60,240 lbs.
October, 11 cars	212,310 "
November, 16 cars	331,155 "
December, 27 cars	575,040 "
1915—January, 14 cars	282,170 "
February, 15 cars	331,440 "
March, 25 cars	538,881 "
April, 26 cars	533,285 "
May	540,000 "

By Freight (Frozen Fish).

1914—September, 4 cars	120,000 "
October, 16 cars	477,013 "
November, 34 cars	960,540 "
December, 35 cars	1,060,537 "
1915—January, 42 cars	1,070,984 "
February, 21 cars	585,600 "
March, 21 cars	739,240 "

Two features in the above returns should be observed. The immediate increase in both express and freight shipments after the passing of the first Order-in-Council, early in December, is remarkable; and the falling-off in the shipments of fresh fish by express in the winter months has its sequel in the decline in freight shipments and the increase in express traffic, towards the spring and summer seasons. During the spring, summer and early autumn seasons, when the weather is more favorable than the winter months for the fishermen, great quantities of fish are packed away in cold storage, as well as being shipped by express to the eastern markets. In the winter time, the work of fishing up along the coast towards Alaska is a dangerous business, and much smaller catches are brought to port. During that time, the cold storage supplies are drawn upon, all of which explains why freight shipments during November, December and January were so much heavier than those that went east by express.

In order to beat out the American railway lines as well as the American ports, the rates by freight and express on the G. T. P. to eastern and middle western points, from Prince Rupert, have been brought down to a low level to suit

the fish trade. The express rate on fresh fish from Prince Rupert to Montreal, Toronto, New York and Boston is three cents per pound, and to Chicago and points west it is only two and three-quarter cents per pound. The freight rate is only one and one-half cents per pound to the same points. The fishing interests at Prince Rupert, which, of course, includes the G. T. P., is not endeavoring to compete with Seattle for the fish business west of the Mississippi River. They want the more densely populated eastern states, and undoubtedly they will realize that ambition. During the past two months, independent boats that had been going to Seattle, have been noticed coming to Prince Rupert, until now some fourteen independent boats, in addition to a few company vessels, are trading at the Canadian port. Seattle's shipping record for last year, however, was 176 cars per month; so that there is still lots of trade for Prince Rupert to divert to its channels.

The citizens of the fishing ports on the Pacific coast of the United States have been rudely awakened by the efforts of the Canadian Government to take their trade away from them, and have concluded that in this case Canada does not suffer by comparison with any native instance of "Yankee" shrewdness. As soon as the attitude of Canada, through the new town of Prince Rupert, began to dawn upon the general business mind of the American Pacific fishing ports this year, a campaign was launched at Washington for the restoration of the duty on fish, and it has even been suggested across the line, in some parts of the country, that the bonding privileges which exist between Canada and the United States be discontinued. The campaign, so far, on the part of Prince Rupert's awakened rivals, has been fruitless. And in the light of the history of fishing negotiations between the two countries, that campaign is likely to remain fruitless. For years the American fishermen of the Atlantic coast labored diligently to secure from their Canadian cousins privileges similar to those which have been given to the fishermen of the Pacific coast unsolicited. At one time the Government of the United States paid to Great Britain and Canada the sum of half a million dollars annually for privileges of like character, and in addition permitted the free entry of Canadian fisheries products during the period the agreement was in effect. When the Canadian Government makes a series of concessions, such as have been made on the Pacific coast, it is not likely, therefore, that good grounds for retaliatory action upon the part of the United States, can be cited. In fact, there exists a Federal statute in the United States, a relic of the days when the fishermen of the neighboring republic were fighting for free entry to Canadian Atlantic ports, that provides that whenever the President of the



On the Left are shown Herrings Frozen in Cold Storage. On the Right, a Glazing Room in a Cold Storage Plant.

United States believes American fishing vessels are being discriminated against in the ports of British North America, he shall have the power by executive order to deny entry into the United States to the fisheries products of the Dominion. When Canada, on the contrary, discriminates in favor of American fishing vessels, as she has done on the Pacific coast, the conclusion is obvious.

The importance of this additional trade to Canada lies in the fact that it comes to a part of the Dominion which is greatly in need of deep sources of revenue. And it is also important that this fish business has been given larger proportions at Prince Rupert through a piece of war time legislation on the part of the Dominion Government. The increased fish production for Canada on the North Pacific coast can surely be regarded as an outstanding feature of the campaign of Patriotism and Production which was

launched with such enthusiasm last autumn. Fishing has been the third most valuable industry in British Columbia, lumbering and mining coming first and second respectively in order of value. Last year the value of the output of the British Columbia fisheries was \$13,891,398. Of the entire output, which, of course, was largely salmon, 223,465 lbs. were of halibut, valued at \$1,734,200. Just about half of that amount of halibut was landed at Prince Rupert last year. A reference to the traffic figures already quoted in this article will show what an increase may be expected in the figures pertaining to the fishing industry of British Columbia for 1915, and particularly of the new northern part of British Columbia. Lumbering and mining in British Columbia, with the exception of some copper properties, are sleeping industries this year. Fishing will be almost at the head of the list.

A COMMERCIAL MUSEUM FOR CANADA

By T. H. WARDLEWORTH and H. T. MELDRUM

THE proposal to establish a commercial museum, or a series of museums, in Canada has for some time been the subject of discussion between representatives of the Executive Council of the Canadian Manufacturers Association, Sir George A. Foster, Minister of Trade and Commerce, and Mr. Richard Grigg, Commissioner of Commerce. Formal representations have been made to the Government and the matter is receiving the careful consideration of the Department of Trade and Commerce.

The following excerpts from the memorandum submitted to the Government will indicate the views of the Council as to the nature of the proposed institution:—

"The primary object of a commercial museum would be to inform our manufacturers and merchants as to the potentialities of the expansion of our industry and commerce, both at home and in foreign markets. There should be provided up to date standard samples, with all correlative information of a commercial nature, of products sold by our competitors either here or elsewhere in the British Empire, or in foreign countries; also of raw materials which are not available in Canada and must be imported for the use of national industries. Various ancillary departments, including the closest connection with a bureau of industrial research, would add to the great usefulness of a commercial museum.

"At the outset, however, the Canadian organization might be directed to the analysis of the trade represented by foreign importation, with the object of discovering such as can be replaced by home-made products, advantageously for all concerned, and to the compilation of such information respecting foreign markets as would tend to stimulate our export trade.

"Such an organization, established at a point to be determined by the Government or at different centres, would be of material assistance for the enlargement of our commerce and industry; while its operations could be carried on to the greatest advantage and with a minimum of expense through the existing machinery of the Department of Trade and Commerce, its Trade Commissioner Service and its other connections abroad; with, of course, the co-operation of the Department of Customs. Our Association is now planning an aggressive export campaign, which would have for result not only the expansion of our industries but the coincident effect of reduced overhead charges and cost of manufacture. The co-operation of the Government by means such as a commercial museum on the lines indicated above would furnish aid of a material and practical nature."

Under the instructions of the Executive Council of the Canadian Manufacturers Association, the writers have visited the Philadelphia Commercial Museum for the purpose of looking into the activities of that institution and its relation to the community and to the foreign trade of the United States. We endeavored particularly to ascertain what features of its work might furnish suggestions for the equipment of the proposed commercial museum for Canada, and to what degree the manufacturers of the United States appreciated such work and made use of the facilities of the institution.

The Philadelphia Commercial Museum.

Our report on these points has been made to the Council, and in the present article we will endeavor to give some idea to the readers of INDUSTRIAL CANADA of the wide scope of the activities of that institution and the splendid work being done, not only in the development of foreign trade relations, but also in educating the youth of the State in a knowledge of domes-



DR. WILSON

Director of the Philadelphia Commercial Museum

tic and foreign industry. A certain part of this work is not exactly pertinent to our idea of a commercial museum, but in its sphere it appears to us to be of very great importance and value, and of interest to Canadian educationalists.

At the outset we should express our high appreciation of the courtesies extended to us by the staff of the museum—Dr. W. P. Wilson, the Director; Mr. Wilfrid Schoff, the Secretary; Mr. Chas. Toothaker, Curator, and who is in charge of the educational work; Mr. J. J. Macfarlane, Librarian and Statistician, and Mr. G. C. Gibson, Assistant Chief of the Foreign Trade Bureau. Every facility was offered us to procure desired information.

The property of the museum comprises seventeen acres of ground with four buildings of imposing appearance, and having a floor space of 200,000 square feet. These were erected at a cost of \$950,000; the house exhibits have an estimated value of \$500,000; and the library is valued at \$50,000. The museum was established in 1894, the site being provided by the city of Philadelphia, and the funds for the erection of buildings and the purchase of exhibits by the State of Pennsylvania. The State grant was augmented by private subscriptions. The museum is governed by a Board of Trustees, eight ex-officio and ten members appointed by the Select and Common Councils of Philadelphia. The ex-officio members are:

The Governor of Pennsylvania;
The Mayor of Philadelphia;
The Presidents of both branches of the City Councils;
The President of the Board of Public Education;
The Superintendent of Public Schools;
The State Superintendent of Public Instruction;
The State Forestry Commissioner.

All serve without remuneration. The Director of the Museum is, as his title indicates, the direct administrator.

Full authority for the government of the museum within the limits authorized by the terms upon which funds for maintenance are granted by the city and by the State, is vested in the Board of Trustees.

The conditions upon which these funds are provided make necessary the division of the activities of the museum into three distinct branches. The State of Pennsylvania decrees that its award shall be devoted to supplementing the work of the State schools, the city of Philadelphia earmarks its annual appropriation of \$50,000 to the maintenance and extension of the exhibits in the museum; the work of assisting in the establishment and extension of the foreign trade relations of the manufacturers and merchants of the State of Pennsylvania or elsewhere in the United States had then to be dealt with by

other means, hence this department is supported by subscriptions of the manufacturers who make use of it. Nevertheless, in spite of this somewhat arbitrary division of forces by reason of financial conditions, the work of the three departments is so interlinked as to make each the complement of the others.

The work of the museum, therefore, falls under three main headings:—

(a) A museum for the instruction of the manufacturer and to promote commercial and geographical knowledge among the general public.

(b) An extensive work in education of a most practical character.

(c) A Foreign Trade Bureau.

The Exhibits.

With respect to the museum proper it may be stated that the exhibits shown to-day represent the conditions of life in the countries with which it is desired to enter into business relations. The aim of the Director has been to show by illustrations of the peoples, their manner of living, their native products and industries, what the needs of such a community in the way of manufactured goods might be.

For instance, a certain space is devoted to the Philippines. The type of inhabitant is represented by a life-sized figure; his dwelling is reproduced; about are grouped his implements and domestic utensils; his womanfolk are shown engaged in producing some of their native weaving, basketware, etc. Samples of the natural products of the islands are exhibited, together with articles made by the natives. In the Japanese section is a great variety of pottery and chinaware, which is full of suggestions to the worker in clays. China finds a place and the exhibit of the varieties of silk produced by the cross-breeding of the silk worm must be full of interest to the textile manufacturer. This plan is followed out in all the sections.

The interesting features of the museum are many and varied. A series of models are displayed illustrating the development of transportation by land and sea from the very earliest times, beginning with the savage with a pack upon his back and coming down to the modern ocean leviathan, whose freight is counted in thousands of tons. There is a collection of coins showing the standard money of the principal commercial nations. The first collection was secured from the Governments exhibiting at the Chicago World's Exposition of 1894, and a great many of the other exhibits were obtained from similar Expositions held in later years.



Commercial Museum Buildings, West Philadelphia



Exhibits of General Products from all
Parts of the World

Foreign Trade Bureau, Philadelphia
Commercial Museum

This portion of the work of the museum is national in its scope. Manufacturers of all parts of the United States are included in its membership, each contributing from \$100 to \$800 per year, according to service rendered, towards the maintenance of its work, making a total revenue in 1913 of nearly \$50,000.

Object of Foreign Trade Bureau.

Broadly stated, the object of the bureau is to develop the international commerce of the United States. This is done by encouraging individual manufacturers, who are equipped to handle the business, to extend the markets for their wares into foreign countries; and then by assisting them to develop that trade.

One of the important features of the plan for a commercial museum suggested to our Government was the collection of samples of the manufactured wares sold in a stated market, which samples would be available for the inspection of the whole industry concerned. The Foreign Trade Bureau of the Philadelphia Commercial Museum procures such samples for an individual member only. A certain manufacturer asks for a report on the possibilities of a particular market; this is procured for him through the trade correspondent of the Bureau in that market, and samples, etc., and information as to trade customs, documents, packing, etc., are sent forward to the manufacturer enquiring. The information is, of course, kept on file, and hence there has been compiled a great amount of data relating to the commerce of the world.

Information on File.

The many sources of information available in foreign countries have been secured by the Bureau directly; there has been practically no Government assistance. The building up of the system to its present efficient state, therefore, has brought it into contact with commercial institutions and commercial houses all over the world, who, therefore, direct many of their enquiries hither.

The information procured and compiled by the Foreign Trade Bureau covers such points as:—

Tariffs; Shipping; Packing; Requirements and opportunities of foreign markets; Trade Mark and Patent Laws; Consular Regulations; Shipping routes and rates, and similar information relating to the invoicing and transportation of goods for foreign countries; Methods of payment and granting of credits; Competition to be met in foreign markets; Names of reliable business houses throughout the world.

The Bureau has a list of more than 375,000 foreign firms, with information regarding their line of business and importance in the trade.

It prints in its own plant a monthly journal, *Commercial America*, issued in both English and Spanish, for circulation abroad in the interests of manufacturers in the United States, and a *Weekly Export Bulletin*, a confidential publication circulated among members of the Bureau.

In addition to this an expert staff of translators is employed, for the purpose of assisting the members and conducting their correspondence to the best advantage. Translations are made from a foreign language into English and *vice versa*. Every trade enquiry sent out includes a notification as to the language in which the correspondence should be carried on, it being properly assumed that a foreign importer would more easily and more willingly do business with a firm which could write in his own language.

The use made of the Bureau is shown by the following statistics published in the report of the Bureau for the year 1913:—

The number of domestic letters received during the year was 28,713; foreign letters, 11,276. The number of domestic letters written, 32,276; foreign letters written, 18,641.

List of foreign merchants compiled and sent to manufacturers numbered 4,723.

General inquiries received and answered, on tariffs, shipping, packing, etc., numbered 1,256, not including many telephone and personal inquiries, of which no record was kept.

There were published in the *Weekly Export Bulletin* letters of inquiry received direct from foreign merchants, to the number of 1,409. To answer these inquiries it required the compilation of lists of American manufacturers to the number of 2,415.

As a necessary complement to the Foreign Trade Bureau, the museum includes a library composed chiefly of publications and reports of Governments of foreign countries, and which is valued at half a million dollars. With a careful division according to countries, we found on its shelves such publications as reports on trade and navigation, statistics and census returns, reports on production, descriptive works. These had been procured from the various Governments or through other channels. Consular reports of all countries publishing the same official gazettes; directories of trade and industry of foreign countries, and a large number of trade journals published throughout the world, go to make up a most valuable



Free Library of Commerce and Travel.

School Children in the Lecture Room.

library of information on the commerce of every part of the globe.

A concise and most striking summary of the trade of the world is furnished in a series of colored charts hung on the walls of the library reading-room. Two charts are devoted to each country of the world, one showing what amount of goods the country exports and the relative value of the purchases of its products by other nations, and the other the imports, similarly depicted.

Assistance to Education.

We have mentioned briefly the educational work of the museum. It is worthy of more than passing notice. In its provision of fundamental training to the youth of the State in the knowledge of the products and methods of production in their own country it must be of immense value.

A large portion of the exhibition space in the museum is set apart for displays of products native to the United States. These are arranged with a view to demonstrating processes of manufacture. The basic product is first shown and then step by step one may see what goods may be derived from this base.

Daily lectures illustrated by lantern slides are given in the museum to classes from the advanced grades of schools on phases of the study of geography the products of certain countries; or on the production of the staple articles of domestic manufacture. The illustrations demonstrate the process of manufacture. The students then supplement the knowledge acquired and fix it more firmly in their minds by examination of the exhibits which show the life and habits of the people of a country, or of products and their derivatives, according to the subject of the lecture.

For schools of the State outside of the city of Philadelphia "loan lectures" are provided. Sets of slides with a lantern and with subject matter for the accompanying lecture are sent out, and passed along from school to school. "Very frequently, says the report of the Curator, Mr. Chas. R. Toothaker, "a lantern will go with a set of slides and a typewritten lecture into a township and will be used in a dozen or more schools in remote rural districts before being returned to Philadelphia. In this way first-class geographic instruction is given, and the expert knowledge of our staff is put in convenient form at the service of every public school teacher in Pennsylvania."

Miniature museums are also prepared and furnished to schools of the States. These consist chiefly of exhibits of native products which are put up in specially-constructed show cases, each exhibit being accompanied by a sufficient amount of reading matter for the assistance of the teacher. These col-

lections become the property of the schools to which they are sent.

Bureau's Work Restricted.

This brief survey will, we trust, convey some idea of the importance of the proposal submitted to the Canadian Government by the Canadian Manufacturers Association, and the manner in which one institution in the United States is carrying on work largely of the nature suggested by us for Canada. The work of the Philadelphia Commercial Museum in its capacity as a public institution is, however, practically confined to the State of Pennsylvania. The Trustees wisely decided that its work in relation to foreign trade should not be so restricted but as the city and State funds granted were voted for work on specific lines, and as the Federal Government declined to vote moneys for the purpose, it was necessary to call on the manufacturers who desired to use the Foreign Trade Bureau to provide for its maintenance. This seemed to us to be a very great drawback to the usefulness of the Bureau, not only in the way of financing, but also by reason of the fact that the Bureau became perforce a semi-private institution. Reports compiled and samples procured are not available to all manufacturers in the industry to which such report is of interest, but only to the particular manufacturer whose contribution to the support of the Bureau has entitled him to ask for it. The service rendered is of an individual nature.

It might not be out of place to note that the income of the Foreign Trade Bureau in 1913 was \$47,531, a striking indication of the value of its work to its subscribers. The cost of operation was \$47,450.

One may readily imagine, however, how vastly greater would be the value of such an institution were the results of its investigations and its facilities generally made available to all the commercial interests of the United States.

Suggestions for Canada.

It was with such a thought in mind that we suggested to the Canadian Government the establishment of a commercial museum under the auspices of the Department of Trade and Commerce, as an institution whose facilities would be devoted to work available to all the producers and commercial interests of Canada. While certain features of the work of the Philadelphia Museum might well be copied, many will necessarily be omitted for purposes of expediency.

Our recommendations point specifically to a development of the foreign trade work, as being most urgently needed and as pointing to the greatest direct and immediate benefit to the Dominion. It would undoubtedly be planned to co-operate

with the Trade Commissioner Service, the Trade Commissioners and Trade Agents to be the agents of the museum in the countries where they are located. A slight extension of their duties would probably suffice for those markets, to provide the requisite material for the Commercial Museum. In some of the other countries, where we have not such agents, trade correspondents would have to be secured and special investigations made. But the additional cost for the service abroad would not be very great.

Having discussed with Dr. Wilson, of the Philadelphia Museum, the question of administration there, we have suggested that there should be appointed to assist, in the direction of the Canadian Museum, a small number of men, say four or five, whose practical experience and daily work in business should make their counsel of value to those appointed to the direct management of the museum. If museums be established in more than one centre, then there should be such an Advisory Board in each city.

RESOLUTIONS PASSED AT ANNUAL CONVENTION C.M.A.

Whereas, with the British Empire at war the duty is imposed upon every loyal Canadian of promoting to the utmost of his ability the just and honorable cause of his King and Country;

And whereas, in the case of manufacturers it is recognized that opportunities and responsibilities of an exceptional character are presented;

Be it resolved, that the Canadian Manufacturers' Association in Annual Meeting assembled urge upon its members:—

(1.) That as producers of munitions or military equipment of any kind they endeavor at all times to supply what is required of them in the highest quality of workmanship and material and at fair prices;

(2.) That as employers of labor they use their best influence to encourage recruiting from among their employees, both for overseas service and to maintain the strength of the active militia, and that as far as may be possible they set for their employees a good example by offering themselves for such service.

Whereas, there is a widespread belief that we have more lines of railway in Canada than our present needs demand and it is important that the situation be most carefully considered;

And whereas, it is feared that Parliament and the various Legislatures of Canada have sometimes issued railway charters that have been used mainly for speculative purposes; also that through lack of proper care and foresight they have in some instances subsidized or guaranteed the interest on bonds of lines which have not served new territory or population but simply paralleled other lines, entailing thereby a drag on the profitable lines, with no corresponding benefit to the public;

And whereas, it is desirable to ascertain if agreements exist among common carriers to the detriment of the business of the country;

And whereas, regulations and arrangements are supposed to exist between the railways and water carriers that now threaten to make ineffectual, in any competitive sense, the enormous sums of money Canada is spending on her canals, harbors and other waterways;

And whereas there is among shippers and the general public a growing sense of irritation and unrest in connection with the numerous applications of the railways from time to time for advancing freight rates, which condition is inimical

to the interests of the railways as well as disturbing to commerce;

And whereas we believe the transportation question to be the largest and most important internal problem that the country has to deal with, and that the Transportation Companies on the one hand and the public on the other are each entitled to fair considerations.

Be it therefore resolved, that the Canadian Manufacturers Association, in Convention assembled, respectfully urges upon the Dominion Government the appointment of a thoroughly competent Commission, properly empowered, for the purpose of seriously investigating transportation conditions in Canada, and making such reports and recommendations as may seem proper;

And be it suggested, that the Commission to be appointed include the Chairman of the Board of Railway Commissioners as well as one qualified representative each from manufacturing, commercial, transportation and agricultural interests.

Whereas, at the present time it is almost impossible to secure ocean space for goods now on order destined to foreign ports, and

Whereas, large additional orders have been placed in Canada for delivery in France and Russia, amounting up to the present to over 200,000 tons for delivery within the next few months, with large quantities of grain and other commodities requiring transport.

Be it resolved, that the Canadian Manufacturers Association now in Convention, while recognizing fully the difficulties existing at present, would welcome any effort the Dominion Government may put forth in the way of conferring with the Imperial Government with the object of arranging for the placing of ships necessary for the transport of Canadian goods from Canadian ports to the United Kingdom, to the Allied countries, and to other parts of the British Empire.

Resolved, that the Canadian Manufacturers Association in Annual Meeting assembled record again its opinion that a well-developed system of technical education is not only prerequisite to the proper development of our national resources but a necessity to the industries of our country if they are to hold their own in competition for world trade. Especially does our Association emphasize the importance of the part to be played by scientific research in such a system, and urges upon the Federal Government the desirability of taking immediate steps to provide for this need, preferably through the appointment of a Commission that will ascertain the problems which call most pressingly for solution and then devise ways and means for utilizing the facilities we already possess as a nation for the solution of those problems.

Further resolved, that this Association pledges itself to support such a Commission to the best of its ability.

Resolved, that the Canadian Manufacturers Association in Annual Meeting assembled again places itself on record as deploring the enormous losses which Canada suffers each year by fire, reiterating its firm belief that these losses which in the end are a tax collectable in the form of insurance premiums, can be largely prevented by education and organization.

Further resolved, that as a means to this end the Governments of those provinces that have not yet provided themselves with the services of a competent Fire-Marshal be memorialized to do so with the least possible delay.

Further resolved, that the Commission of Conservation be requested to interest itself in the solution of this problem, which is so obviously cognate to the purposes for which it was created, and endeavor to stimulate and to co-ordinate the work to be done by provinces, by municipalities and individuals.

MR. J. H. SHERRARD

By H. T. MELDRUM



H. SHERRARD, of Montreal, the President-elect of the Canadian Manufacturers Association, is one of the most able and aggressive men among the Association members. He is a big business man and a big citizen. His success as a manufacturer has been remarkable and yet few men have given so large a share of interest and attention to public service. His personality combines the characteristics of the two races from which he traces his parentage; the impulsive generosity of the Irish, tempered by the shrewdness of the Scot.

Born in Shediac, N.B., in 1866, Mr. Sherrard came to Montreal about twenty-five years ago to try his fortune. His two greatest assets were a sunny smile and a boundless capacity for work. He became connected with the Alaska Feather & Down Co., Ltd., then operating on a very modest scale indeed. Mr. Sherrard started to make it grow and the result is to-day an organization comprising a string of five factories and many warehouses from the Atlantic to the Pacific, "the biggest and best-equipped bedding manufacturing organization in the British Empire," and the second largest in the world. Mr. Sherrard is President and Managing Director.

Mr. Sherrard's record of active service for the Association extends over many years. He has well earned promotion to the highest office in the Association, besides being well worthy of it. He was first nominated for the Executive Committee of the Montreal Branch of the Canadian Manufacturers Association in 1905 and was defeated. He accepted the verdict cheerfully, and the next year his name was again put forward. He was elected, and records show how his name steadily moved up the list on the ballot paper until he was elected Chairman of the Branch by acclamation. He had already been elected to the General Council of the Association; and he then filled successively the offices of Quebec Vice-President, Second Vice-President, First Vice-President.

One of the most important things with which the Association has been connected during the past year, was the conference over the farming problems of the West. The cleavage between East and West, fostered by political agitators who were trying to play the grain grower against the manufacturer, was becoming acute. On Mr. Sherrard's initiative a conference was held in Winnipeg. Half a dozen representative manufacturers sat down with the heads of the agricultural organizations with a view to threshing out their grievances and arriving at a basis for co-operation. Nothing tangible has yet resulted but the rapprochement, even to its present extent, is of great value to the cause of Canadian unity.

It might not be out of place to mention here that Mr. Sherrard is a farmer himself—for one day a-week. It is a recreation though, not a vocation.

An example of the practical nature of Mr. Sherrard's charity might be noted. Some years ago there was a great typhoid epidemic in Montreal and a great deal of distress, especially among the poorer classes. The hospitals were filled to overflowing. Nobody seemed very clear what to do about it. One suggested one thing and another something else. Mr. Sherrard had a plan and, instead of writing to the papers about it, he started it going. This is his way. There was a big factory building vacant. He prevailed on the owners to clean it up and heat it for an emergency hospital; the Alaska Company provided the bedding; other manufacturers came forward with other supplies; physicians offered their services and in a few days there was a first-class hospital, fully equipped and with a good staff, in operation.

It was with such a record of work that he was called to the Board of Management of the Montreal General Hospital; and also was elected to the Vice-Presidency of the Victorian Order of Nurses.

His other activities have been numerous. For some years he was a member of the Westmount City Council and did splendid work as Chairman of the Parks Committee of that model municipality. He was also a member of the Executive Committee of the Imperial Home Reunion Association of Montreal.

When the call came for recruits to fight the Empire's battles, Mr. Sherrard said to his employees: "Those of you who can go, should go. The families of those who enlist will be provided for by the company; and if you come back, a job will be waiting for you." Was not this practical patriotism?

Shrewd and energetic in business, an indefatigable worker, of strong principles but broad-minded, and with a high ideal of the duties of citizenship, Mr. Sherrard can be looked to as a big representative Canadian, well fitted for the leadership of Canada's greatest commercial organization.



MR. J. H. SHERRARD

Alaska Feather and Down Company, Limited. Elected President of the Canadian Manufacturers Association for 1915-1916

ADDRESS OF PRESIDENT SHERRARD

Delivered at the Closing Session of the C.M.A. Convention in Toronto. June 10th, 1915

APPRECIATE fully and very humbly the great honor you have conferred on me, and shall earnestly endeavor to justify your confidence by directing the activities of the Association as in the past, for the benefit of all Canadians as well as for the manufacturers.

My contact with the Executive work of the Association has been such that I undertake this office with confidence, because the real work is done by a very loyal and able staff that is well organized and well governed; and because you have chosen a number of able men who have consented to assist me in its government. I have served on the committees of the Association for some years, and it has always been a privilege and an inspiration to work with men of large interests who have freely served the Association, many of them regularly travelling hundreds of miles at their own expense to lend their counsel for the general good.

I feel that the office which you have elected me to, gives me the privilege of asking your interest and support in the problems the Council will have to deal with this year. I would ask this interest and support as a mark of your appreciation of the work the Council undertakes in your behalf, but I would urge you in your own interests most of all to follow closely the work of the Association, and to give the Council the benefit of your advice and suggestions on those matters which you can assist. The Association exists for the purpose of promoting, protecting and improving industries in Canada, and you can get its greatest benefits by giving your personal co-operation.

The Association has an honorable record of achievement which we may well be proud of. Beginning in a small way when our Dominion was groping its way into being, it has grown, as our Dominion has grown, and has become a powerful influence for good throughout Canada.

This year will stand out in the history of our Association as a year of problems. The world is passing through a period of upheaval so great that it staggers the imagination, an upheaval so vast that no man can foresee its consequences, but we are confident that our cause is right, and that right will prevail. I am persuaded that the settling time is near at hand; and I am fully persuaded that when the settling time comes Canada will be in direct line for great benefits. A year ago I was an ultramarine blue pessimist, but I am an optimist to-day.

A year ago, Canada was suffering from a depression that was acute. The flood of borrowed capital had stopped; unemployment was general; our factories were running on short time—holding our help together in the hope that a bumper crop would restore some measure of prosperity. Early in July the crop report shattered this hope; and to make our position more hopeless we had acquired the habit, as individuals and as a nation, of spending money as carelessly as a drunken sailor.

The Effect of the War.

Only a miracle could have saved us, and gentlemen, that miracle happened. This terrible war has done for us what no national adversity could have done, in restoring our balance; and we are learning to live sanely; and to think of better things than making and spending money. We are learning to bear each other's burdens—we are learning that

old, new lesson that "it is more blessed to give than to receive."

The war has brought us spiritual blessing, and it has brought us some degree of material blessing. That same patriotic fervor which impelled us to give our first born to save the Empire has urged us to greater production, that we might help to feed and supply the Empire. Our farmers have cultivated more fields, and they have cultivated them better, and the yield promises to be the best in our history, and at better prices than we have ever known. Our manufacturers, too, have responded to the Empire's need and have won royal praise for the quality and quantity of war munitions they have supplied, and when I say manufacturers, I want the term to include our partners in production, the army of workmen who have helped the nation's need willingly and splendidly. This will mean a large increase in our exports, and an inflow of capital which we will have earned.

The Made-in-Canada Campaign.

In addition to this, the war has brought about a patriotic sentiment in favor of goods Made-in-Canada, and this sentiment will greatly reduce our imports of goods formerly bought abroad, and will keep money circulating at home for the benefit of Canadians instead of sending it out of Canada to benefit other countries. The "Made-in-Canada" movement had its birth in an unselfish desire to assist unemployment. It aimed to keep smoke in the cottage chimneys as well as in the factory chimneys. The "Made-in-Canada" movement is a sentiment, but it remains for us, the manufacturers of Canada, to crystalize that sentiment into a principle by supplying goods of, at least, equal value with any that are imported, and I am glad to say with knowledge that successful manufacturers are doing this already—and more, I am glad to say that Canada has a large and growing number of manufacturers who make goods that they guarantee, and stand behind, and that they sell as cheaply as the imported articles that have no tangible guarantee, and I wish to take this opportunity to announce that the Manufacturers Association has no sympathy and no patience with any of its members who make unworthy goods or who charge unfair prices for their products.

Strictly Neutral.

This Association has no politics, and has used no influence in shaping the present tariff. Ours is not a protective tariff, but a tariff for revenue only, and for many of us it comes short of being a protective tariff, but I want to congratulate the Government for the manner in which it has distributed the added burden of the war cost, a burden which has fallen more heavily on manufacturers than any other class of our citizens. I want to congratulate the Government on its appointment of a Board of expert business men to supervise the purchase of militia supplies. Our Government has new and enormous problems to work out, and this appointment is full of promise that common sense ways will be adopted to work them out. The Purchasing Committee is composed of gentlemen of known probity and ability who give their valuable services freely, and I gladly inform them that this Association stands ready to give them the fullest assistance of its organization of experts and its full, classified information; and I also assure them that scores of able, expert men among our members are ready and willing to help them

in their heavy duties whenever their services can be of assistance.

I said that this was a year of problems. Many of them contain enormous possibilities for Canadian development and prosperity. The possibility of doing an export business in Canadian manufactured goods has already been discussed in Convention. Canada has been a borrowing nation for a period of years, and has accumulated a burden of debt that must be paid, and our only means of paying even the interest on this debt is by increasing our exports.

The farmers are doing their part, and doing it well, but they have a product to sell which the world needs and will pay handsomely for, and they do not have to overcome the difficulties of marketing, or transportation, or finance.

The Problems of the Manufacturer.

The manufacturers have to discover their market, in competition with cheap labor; and will have to overcome the obstacles of habit, and transport, and finance; but conditions of production in Europe have changed, and sentiment has enormously changed, and we believe that there is an opportunity for our manufacturers to get, at least, some of the outside world business. This can only be done successfully through co-operative effort, and will require courage, and efficiency and patience.

We must produce goods, and give service that will deserve the confidence of overseas customers, and when we qualify for world patronage, we will have earned and secured the home market.

There are good reasons for expecting that at the close of the war a trade agreement will be arranged between the Allies that will include Canada, and if this is done we will have a possible customer in Russia alone, that will greatly benefit Canadian industry, and that should make British Columbia a manufacturing Province of the first rank.

Our retiring President has told you of the part this Association has taken in securing the co-operation of Canadian farmers. I look for a development from this beginning that will make Canada a better country to live in. We need prosperous farmers, even more than we need prosperous manufacturers or prosperous mechanics, and there is no good reason why we should not all be prosperous.

The Government's Task.

The Government has been greatly overworked by the enormous new emergency burden they are carrying so well, but we have excellent reason to expect that a broad constructive policy will soon be worked out and adopted to improve the material and social condition of our farmers. When we know that we have sold our wheat every year for the past ten years at the sag of the market, and that we have obliged the railway to provide equipment to move this wheat in a few weeks in order to get the lowest prices, and when we know that our method of financing the wheat compels this we begin to have some idea of the importance of devising a remedy.

We will have a new, and a big problem to face at the close of the war, when tens of thousands of men return to take up life in Canada, and the time to perfect plans for their greatest prosperity is before they return.

I trust that the Government will appoint a Commission of our very ablest Canadians to deal with this important problem, and that facilities will be perfected for giving those of our returning soldiers, who are fitted to return to the land, the best that our country can offer. Not merely grants

of land to tempt the sharks, but homes, where they can be assured of prosperity and comfort and social advantages.

Our Soldiers.

I have purposely abstained from speaking of the war. Our hearts are too full and our hearths are too empty to speak of the heroes who have won undying fame for Canada. They have made the name "Canadian" stand for valor and honor; and they have laid on us the sacred charge of maintaining the high standards they have set. Our debt to them can never be discharged, but we can show some appreciation by taking the best of care of their families while they are gone, and by providing wisely, and generously for those who return. The war in its results will affect every man, woman and child in Canada; and while it lasts every man owes a direct duty to the State; and that duty demands service, either at the front or for those who have taken our places there. I know of a prosperous concern who refused to help the Red Cross work because they considered it the duty of the Government to do this. I know of a wealthy merchant who refused to help the Patriotic Fund because the war had depreciated the value of his investments. I am glad to say that neither of these are manufacturers. It is not for us to be the judges of other men's motives, but I believe the Great Judge will require better excuses than these.

I heard with shame of a manufacturing concern who placed obstacles in the way of their employees enlisting for active service. It is some comfort to know that this concern afterwards changed its attitude, and I gladly bear testimony that hundreds of manufacturers have enabled their men to enlist by giving them assurance that their families would be well cared for in their absence and that if they came back their positions would be awaiting them.

This is a time of national testing—our Government, our institutions, our very Christianity is under the acid test; and while some politicians, and some business men will corrode under the test, I believe, and am confident that the great body of Canadians will emerge from this testing time as our boys at the front have emerged from their tests with a glorious record of duty well done.

CANADIAN NATIONAL EXHIBITION.

The Canadian National Exhibition, which will be held in Toronto from August 28th to September 13th, will mark a great epoch in the history of the patriotic service. This year is essentially a patriotic year, and every event that marks its progress must breathe the spirit of patriotism and Imperialism.

MERCHANTS BANK REPORT.

The assets of the Merchants Bank of Canada now stand at \$86,190,464, according to the annual statement for the year ending April 30th, 1915. The principal items included in the assets are: Dominion notes held, \$12,732,618; railway and other bonds, \$4,968,195; call loans in Canada on bonds, etc., \$3,606,342; current loans and discounts in Canada, \$47,401,858; bank premises, \$4,166,147. The regular dividend of 10% was paid.

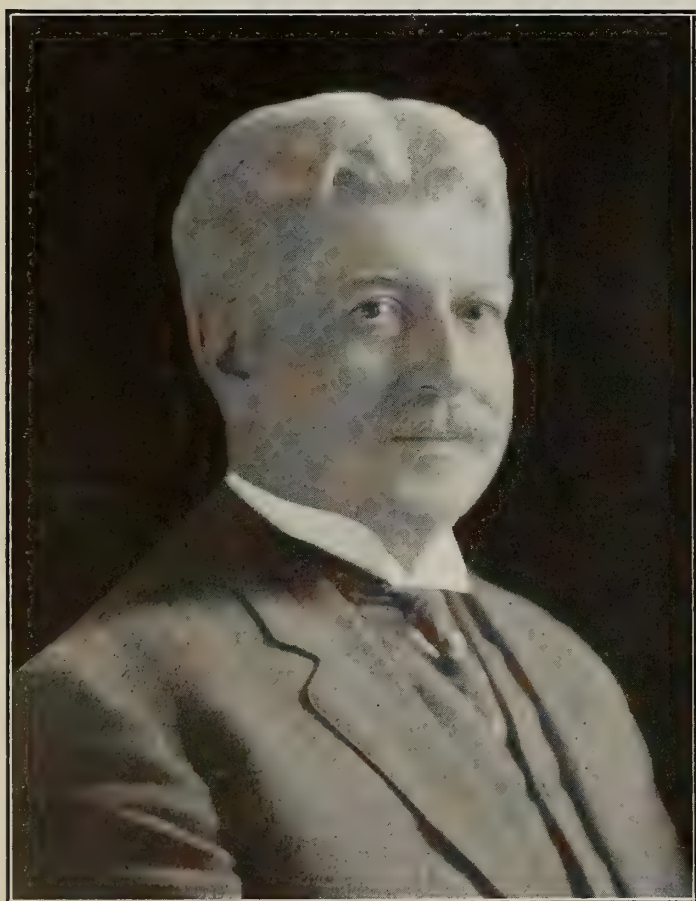
The interest-bearing deposits amount to \$50,037,001, and deposits not bearing interest amount to \$12,692,061. The report of the bank shows a year of conservative management in a trying period of banking history.

ADDRESS OF EX-PRESIDENT HENDERSON

**A Comprehensive Survey of the Year's Activities—Duties of Manufacturers
Towards the War Discussed—Confidence in the Future Renewed
by Glance Over the Past**

IN keeping with the time-honored custom of our Association, it is my duty, no less than my privilege, as your President, to address you to-day upon some of the more important problems that concern us as business men, to survey briefly the field of our past endeavors, and to invite attention, perhaps, to new fields that should engage our attention.

But first let me extend to you all an official welcome to this meeting, and to the meetings that are to follow. And let me assure you that my welcome embraces not only your presence, but also your participation in the discussions.



MR. E. G. HENDERSON
Canadian Salt Co., Ltd.

Retiring President of the Canadian Manufacturers Association, who has presided over its affairs with marked success in the most trying period of its history

Prompted by a sense of public duty, you have made sacrifices, both of time and of money, to be present here to-day. I want you to know that your coming is appreciated, but in a larger measure I want you to feel that your views and your advice will also be appreciated. These meetings are yours to make of them what you will. You combine among yourselves a wealth of knowledge and a breadth of vision that should ensure your reaching wise decisions; you also possess in the aggregate a weight of influence that should enable you to give effect to your decisions. Let me urge that you approach your deliberations with due seriousness of purpose, yet with that moderation that is befitting those who realize their power and their responsibility, remembering always

that you hold in your keeping the reputation of an organization that has set for itself high ideals.

To many of you, as to myself, these Conventions are as milestones that grimly remind us of the passage of time. As an Association we are getting up in years; as individuals, some of us are getting old. Happily for the cause in which we labor, the youth of our Association is renewed from time to time, and thus the continuity of its work is assured. But there is a tinge of sadness in the thought that our activity as individuals must sooner or later reach its termination. These are serious times in which we live, times that are setting a cheaper price on human life, and that should in consequence inspire within us a determination to sell our lives as dearly as possible. Sadness we cannot escape, for that is our common heritage, but devotion to duty, in whatever form that duty may present itself, will not only assuage our sadness, but spare us the anguish that comes from regret.

The call that should ring loudest in our ears to-day is the call of Duty,—duty to ourselves, to our Association, to our country and to our King. The last should come first, and the first should come last; but all are compatible providing we have the right conception of what is our duty. Let this thought be borne steadily in mind in the discussions that will follow. Let considerations of private advantage or of personal gain be subordinated to considerations of what will promote the cause of our King and Country, for individual profit can avail us nothing if success in the larger issue is denied us. A conference of Canadian manufacturers should always be recognized as an occasion for serious thought and earnest effort. This year, the year of war, our conference makes louder demand for recognition in this respect. Let us, therefore, attune our hearts and minds to the duty before us, and with firmer resolution and fresh confidence look forward to our reunion in the year of peace, and to the pride and satisfaction that we know will be ours if we contribute in however humble a manner to the defeat of tyranny and the triumph of justice.

The Association and the War.

From whatever angle we survey the activities of our organization during the past year, there is always an obtruding feature that is indissolubly associated with the war.

To me, personally, it is a matter for gratification that official recognition was given so early in the struggle to the duties devolving upon us, both as an association and as individuals. Hardly had we recovered from the first shock of surprise before we set for our membership a standard of conduct and a code of honor that left nothing for criticism. We urged among other things that in supplying military equipment of any kind care should be exercised to see that material and workmanship were all of the highest; that a contract for such supplies should never be regarded as the occasion for exacting an additional profit, but always as the occasion for rendering the Empire valuable aid; that each member should do his utmost to minimize unemployment, even though it sometimes involved the sacrificing of profits; that every encouragement and assistance should be given those who thought of enlisting; and lastly, that the dependents of those on active service should be amply provided for.

Were all the facts available, I believe it could be shown that the manufacturers of Canada, as a class, have lived well up to their obligations. They have subscribed generously to the Patriotic Fund and the Red Cross Fund, often supplying the initiative that made these funds a success. I feel sure, too, that they have paid serious heed to their duties in relation to the problem of unemployment.

It has been alleged that in the matter of army contracts some manufacturers have shown an undue greed for profit, and have occasionally attempted to satisfy their greed by resorting to dishonest practices. Such charges may, perhaps, be laid in a few isolated cases. If it can be established that they are correct, then I say unhesitatingly that the offenders, no matter who they may be, should be dealt with as severely as the laws of the land will permit, for any man who would enrich himself by impairing the efficiency or imperilling the lives of the soldiers who are fighting his own battles is in my opinion no better than a traitor. I refuse to believe, however, that conduct so reprehensible has been characteristic of manufacturers as a class; on the contrary I am assured that the service afforded by our manufacturers in the great majority of cases left little to be desired. Even if goods did sometimes not come up to specification, or if the prices charged did sometimes seem unduly high, it is not always fair to impugn the motives of the manufacturers supplying them. The exacting demands of the Militia Department in the matter of deliveries frequently left no time for that care in the selection of materials and in the supervision of workmanship that would otherwise have been given; for a similar reason it was frequently impossible for the contractor to spend time in searching out the cheapest market to purchase his materials. Nor should it be forgotten that the Department itself, taken unawares, was overworked and under-staffed, and due allowance ought to be made for the enormous pressure under which its multifarious duties had to be performed. But I make no excuse for those who did wrong, if dishonesty can be proved.

Not so much to such things, but to the pernicious influences to which the Officers of the Department were exposed, and to the restrictions by which they were surrounded, does criticism properly attach. Any man upon whom the duty is laid of purchasing military equipment or munitions of war, to meet an emergency, ought first to be appointed on the sole ground of his qualifications for the position, and ought then to be given a free hand to act in accordance with the dictates of his own judgment. But he cannot so act if the list of persons or firms with whom he shall negotiate is definitely prescribed for him; still less can he do so if he is required to pay heed to the promptings of those who have only political ends to serve. You will all agree with me, I am sure, in commending the Premier for his sound judgment in delegating these important duties for the future to a Commission of business men, as well as for his courage in deciding to abolish the patronage list. By these acts he has done much to inspire confidence in his administration, and it is sincerely to be hoped that the results attained will prove so eminently satisfactory as to preclude forever a reversion to the antiquated and unbusiness-like methods that have heretofore prevailed. The Government of this country must be carried on as a business undertaking, and not for the advantage of any politician—and Sir Robert Borden by his action has determined this.

Labor.

Among the outstanding problems of the year, none has given us more concern than that of unemployment. Born of

the trade depression, it was inevitable that it should quickly develop symptoms of acuteness under the conditions brought about by the war. The sudden restriction of credits, the inordinate advance in the price of certain raw materials, the loss of markets and the general dislocation of business left many an employer no alternative but to retrench, and in the process of retrenchment labor unfortunately had to suffer.

In this connection it will be recalled that early in the year we recognized the responsibility resting upon every manufacturer of doing his share towards the solution of the problem, and suggested among means to that end, first a rigid adherence to the Made-in-Canada doctrine, and second the acceptance of orders at prices that would yield no profit rather than see the work upon those orders lost to the country. Where pay rolls had to be reduced, we suggested shortening the hours of labor and giving partial employment to all, in preference to discharging a portion of the staff and giving full employment to the remainder.

I am happy to believe that throughout the past year, which has been one of severe strain, manufacturers as a class have studied the interests of their employees with more than usual care. The fact that rates of wages have been well maintained, at a time when the supply of labor so far exceeded the demand, bears eloquent testimony to an attitude of fairness and of helpfulness on the part of employers. Machinery has frequently been kept in motion for which there was no business justification, enterprise and resourcefulness have been displayed in the securing of orders upon which there was no commensurate return, all to the end that work might be provided and distress relieved.

In resolving that public works of every kind should be continued without interruption, our Federal and Provincial Governments and our Municipalities did much to relieve the situation. The enlistment of 100,000 men for active service was another important factor in reducing the ranks of the unemployed. If Italy's participation in the war is followed by the entry of Roumania, Bulgaria and Greece on the side of the Allies there should be an exodus of these nationals returning to their colors that should bring the problem still nearer solution. The distribution throughout Canada of some \$200,000,000 of shell contracts has revealed the fact that in the case of machinists we are now threatened with a shortage of labor. Unfortunately the building trades show no signs as yet of a return to normal conditions, though with a good crop they will undoubtedly improve in the fall.

Meanwhile it may be remarked in passing that the *Labour Gazette* estimates that there are still 70,000 unemployed in our larger cities alone. If this be true, and if anything like the same proportion holds good in the smaller places, it points to the fact that earnest thought and thorough organization are still needed for the final solution of the problem, which in its earlier stages must have been more acute than most of us realized.

Production.

The suggestion has frequently been offered that there should be an organized movement to place our surplus labor back upon the land. To some extent I believe this can and should be done. In close proximity to all our cities are large tracts of unoccupied land, frequently held for speculative purposes. Conveniently situated to those who are temporarily out of work, these areas offer possibilities in the way of production which should not be neglected. No great expense would be involved in providing needy, but willing, workers with seed and the tools for cultivation; given these, with a fair measure of intelligence, the average worker should be

able to gain from mother earth the means of sustenance for himself and for his family.

The feature which specially commends itself in connection with such a plan is that while reducing unemployment it increases production, and the latter is unquestionably one of our most pressing duties. On this ground it might seem even more desirable to initiate a movement for populating vacant farm land with the unemployed of our towns and cities. But it must not be forgotten that farming is an occupation that cannot be properly engaged in without training and experience, and while during the present era of high prices the experiment might be tried with partial success, it would likely leave us with a new problem on our hands, once conditions became normal again.

I have just referred to increased production as one of the first duties of the hour. It presents itself to us in two aspects, one transient, the other permanent. The transient aspect is easily recognized and appreciated, because it is closely associated with current events and with the thoughts that are daily uppermost in our minds. It tells us in brief, that if Canada is to be the granary of the Empire, in fact, as well as in name, she must bestir herself and supply in more liberal quantities the food of which the Empire stands in need. The permanent aspect is more difficult of perception but none the less real and important. It brings home to us the truth of our financial position, and reminds us that we have no alternative but to increase our production if we are to meet our obligations as a nation. For years the balance of trade has been strongly against us; for years, too, we have been piling up interest charges against ourselves by borrowing the money required for our various undertakings. Heretofore we have paid our debts by the simple process of contracting new debts. But borrowing on the same scale is no longer possible, and unless we are to default we must learn to create more wealth ourselves, and that we can only do by working, by producing.

Meeting the Grain Growers.

It was with this thought in mind that we arranged a conference last November with the Grain Growers of the West. We cherished the hope that the faculty for organization possessed by business men could perhaps be utilized in some way to hasten the consummation of what we all felt to be highly desirable in the interests of the Dominion. Had such assistance been desired we would have given it with genuine pleasure. We were easily persuaded, however, after consultation with the Grain Growers, that underlying the problem of increased agricultural production was a deeper and more vital problem that had first to be solved, namely, that of providing the pursuit of agriculture with a solid and permanent foundation of prosperity. In other words, we conceded the principle that those upon whom we depended for the cultivation of the soil should be enabled to derive a return that would assure them not simply an existence, but a measure of independence.

No one who has had the privilege of meeting representative agriculturists from the West and discussing their life-work with them can fail to be impressed with the fact that they labor under heavy handicaps, and are intensely earnest in their endeavors to improve their position. Without going into detail, for the subject is too large to touch upon except in passing, permit me to offer the opinion that agriculture, as our great basic industry, should receive encouragement and practical assistance on the most liberal scale that our country can afford. There is need for more technical instruction of the kind that can be brought to the farmer on his own farm; there is need for improved methods of distribu-

tion, both for incoming supplies and outgoing produce; there is need for better and cheaper transportation all the way from the farm to the ultimate market; there is need for cheaper money or easier terms of credit; in short, there is need for anything and everything that will conduce to the end of making life upon the farm more attractive, whether from the standpoint of material welfare, of social happiness, or of educational advantage.

All these and other questions, including even the tariff, were discussed at the conference with frankness and with friendliness. To our mutual satisfaction we found that there were many lines of policy upon which we could agree and in which our co-operation should follow as a matter of course. A renewal of the discussion on some future occasion will, I hope, point the way to a compromise on issues where our opinions now differ. For the present I am content to know that suspicion and distrust have been largely allayed, that a basis of mutual confidence is in a fair way to be established, and that for the future we may look forward to interchanges of opinion, not through the medium of a mischief-making press, but in social concourse and in amity.

Federal Agricultural Policy.

While on this subject I desire to add my word of appreciation for the splendid programme of agricultural aid that is being carried out under the able direction of Dr. C. C. James. The legislation which authorized the Federal Government to make special grants to the Provinces for educational work was only enacted at the session of 1913, but so quickly has it been taken advantage of that this year there will be expended by the Provinces no less than \$900,000, all under plans duly approved at Ottawa. Some of it will be used to enlarge and to better equip agricultural colleges, some to conduct demonstrational and experimental work in dairying, stock-raising and field husbandry, some to provide for the teaching of agriculture in rural schools.

In addition to the above, liberal appropriations are being wisely expended by the Minister of Agriculture for special lines of work arising out of his own Department. For example, the burnt-out areas of Southern Alberta and South-western Saskatchewan revealed the fact that here and there, like oases in the desert, were crops that had withstood the drought for no other reason than that scientific methods had been employed in their production. This year, even though the same weather conditions prevail, the percentage of crop failures should be much less, for, thanks to the Minister's enterprise, twenty-five demonstration farms are already heralding far and wide through the territory in question the glad tidings of how crops can be saved.

The improvement of live stock is another matter that is receiving close attention and generous financial aid. By arrangement with the Department any association of breeders organized in conformity with rules that have been laid down may secure the services of pure-bred sires for an indefinite period. This provision has been so widely taken advantage of that nearly \$400,000 a year is now required to meet the demands of breeders who are anxious to build up their herds.

These illustrations, chosen at random, typify the thoroughly practical character of the work which the Department is doing, and suggest unlimited opportunities for useful service which ought to be subsidized as freely as the revenues of the country will permit.

Canada's Fire Waste.

But in our endeavors to increase production and to lay broader and deeper foundations for our national prosperity, we should not lose sight of the equally important problem of conserving the assets we already possess.

In this connection I feel that I would be neglecting a duty if I did not join with others in deploring the awful wastage we allow Canada to suffer each year by fire. I use the word allow advisedly, for by far the greater part of that wastage is preventable. For 1914 it amounted to something like \$24,300,000 for stock and buildings alone, a total which equalled, if it did not exceed, our net profits from the growing of wheat. If to this, however, we add the shocking losses sustained each year through the destruction of standing timber, and attempt to compute the damage indirectly suffered by reason of our supplies of moisture not being properly conserved, we cannot but be appalled at the results of what is after all very largely our own carelessness.

In Europe, where property is apparently held in higher regard than it is with us, an effort is made to ascertain definitely the cause of every fire, and if shown to have been due to carelessness of any kind, the offending party is deemed to have committed an offence against society, and is suitably punished. Such action is no more than just when considered from the standpoint of insurance. Insurance is a business necessity imposed upon all. The rates are high or low according as the losses sustained are large or small. Those losses have to be paid for out of a common fund to which all must contribute, and the man who draws upon that fund does so at the expense of his fellows.

What is wanted in Canada is not greater efficiency in fighting fires, but more zeal in preventing fires. We need to be educated to a proper appreciation of the problem, and we need to be organized in a manner that will enable the necessary remedies to be applied. As individuals we can all do a great deal, but if our aggregate losses are to show any appreciable diminution there must be concerted and systematic action by the Provinces. The fact that Ontario, for example, is still without the services of a Fire-Marshall, despite the enactment of enabling legislation two years ago, is characteristic of the indifference shown by those who should lead rather than follow public sentiment in so important a matter.

Transportation.

In the field of transportation, our interest during the past year has centred round the application of the railways for permission to increase their rates, both on international and domestic traffic. While first thoughts might suggest the desirability of our Association opposing any increase on principle, it will be apparent on maturer consideration that our railways must be allowed to live and do business at a reasonable profit the same as anybody else. Moreover, as buyers of manufactured goods, they afford one of the largest and steadiest markets we possess, and anything that would impair their chances of success would indirectly impair our own.

For years we manufacturers have been clamoring for better service from the railways. We have asked for quicker despatch, for more adequate terminal facilities and for improved equipment. The railways have tried to respond to our demands, and while not giving us everything we wanted, they have at least met us part way. Would it now be altogether fair for us to say that the new service should still be charged for at the old rates, when we know that the improvements we enjoy must have cost the railways many millions of dollars?

On the other hand, it would seem pertinent for us to enquire whether the application of the railways for an increase is not dictated by a desire to scale up their revenues from profitable portions of their service in order to cover losses incurred elsewhere. We have good reasons for believing that railway corporations, like industrial incorporations, sometimes make bad investments in building new lines, anti-

cipating a volume of business which does not materialize. When that occurs with an industrial corporation it must be taken care of in the reserve for depreciation or written off as a loss. Why should the railways not do the same instead of raising their charges so as to make the good carry the bad?

They tell us that the proposed increases follow as a necessary result of the increased cost of doing business, and point to higher taxes, higher wages, and new duties required of them by legislation and by orders of the Commission as justifying what they ask. In answer to this we venture to enquire whether the increase of operating expense to which the railways point is not more than offset by a corresponding increase in their gross earnings. In any event we contend that the results shown during a year when business of all kinds is away below normal afford no satisfactory ground upon which to base a new schedule of rates, but that on the contrary the issue should be decided after an examination and an intelligent understanding of the conditions prevailing when trade is normal.

For these reasons we have stood out resolutely for an order requiring the railways to show cause. We desire to be fair, and in taking such a stand we believe we are fair. All we say is that if the increases are to be allowed, then we want to have the satisfaction of knowing that they are justified.

The Outlook.

I cannot wish the railways better fortune with their application than by expressing the hope that the speedy return of good times may justify them in withdrawing it. For well over a year now we have shared with them the troubles of adversity. Like them, we too are anxious that the balance should appear on the right side of the ledger. We keep worrying along in the expectation that prosperity will come back to us, and daily we scan the horizon for indications that it is on the way.

While the future is still full of uncertainties so far as business is concerned, the outlook offers many features of encouragement. In the first place our financial condition is showing sure signs of improvement. We have greatly reduced the spread between our imports and our exports, by decreasing the former and increasing the latter. Before the year is out the exports should predominate, which means that instead of adding to our trade debts we will have begun to pay some of them off. Moreover, we have ceased to borrow money to build ourselves new equipment, and have turned our attention to the more important task of putting the equipment we already possess to some productive use. In other words, instead of making ourselves responsible for still heavier interest charges, we are beginning to take serious thought of paying something on principal account. As previously stated, the liquidation of our indebtedness to other nations can only come about through production, and it is gratifying to note the enthusiasm and enterprise that are now being displayed in so commendable a cause.

So far as manufacturing industry is concerned, an added incentive to production is afforded by the tariff increases recently enacted. Coming as they did at a time when outside competition for domestic orders was being pressed almost to the point of demoralization, they ushered in a change that proved to be most welcome. Through them the home market has been made more secure, and a strategic position has been created for the Canadian manufacturer from which to attack the problem of export trade with improved chances of success.

It is true, of course, that many raw materials are now taxed that formerly were free, and in certain cases this might appear to cause, and perhaps does cause, some hardship. Generally speaking, however, such taxes have been accepted

without demur, partially on account of the fact that finished products are protected by a corresponding advance, but mainly because they are recognized as the most logical means of raising an emergency revenue.

Apart from improvements in business due to this cause, an undercurrent of hopefulness and confidence has been inspired by the demonstration the Allies have given of their ability to control the situation in Europe, and sooner or later this spirit is certain to be reflected in larger buying. The enormous orders for munitions and army supplies now being executed in Canada should help materially in tiding us over the period of uncertainty that always precedes the harvesting of a new crop. Naturally it is to the crop we look as the most important single factor making for prosperity. This year it gives promise of being unusually large because of the increased area under cultivation, and even though nothing better than the normal yield per acre is secured, its total value as compared with last year's crop should be practically double because of the high prices that will undoubtedly be realized. Things are still quiet in the building and allied trades, nor do I think they are likely to improve until the harvest has increased our supply of ready money. On the whole, my estimate of the situation is that we have passed the worst and that from now to the end of the war business should slowly but steadily improve.

For the period following the declaration of peace I find myself unable to share the optimistic views that have been expressed in some quarters. The high prices now prevailing can hardly be expected to continue after the passing of the urgency that is their main cause. We must remember, too, that millions of men are temporarily withdrawn from their ordinary occupations of production by reason of the war, and a shortage has thus been created which will be quickly overtaken once the war is ended.

The advent of lower prices, which for these reasons seems inevitable, might be less significant if there were any fair hope that our volume of business could be increased. To some extent it can, perhaps, in connection with the reconstruction of those areas that have been devastated, though the amount of money available for such reconstruction will at first be very limited. Nor should we build too much hope on the prospect of securing a large part of the foreign trade now lost to Germany and Austria. If the Allies are victorious these countries will be required to pay a heavy war indemnity, and this they cannot do unless we allow them to produce and to pay off their debt with the fruits of their production.

It is sometimes claimed that after the war the flood of immigration into Canada will be resumed. For such a movement only one reason can be advanced, namely, the desire of Europeans to remove themselves to a land where the horrors of battle can never overtake them. But does not this assume a willingness on the part of Germans and Austrians to take up their abode with the enemy they have sworn to hate, and does it not also assume a readiness on our part to try to assimilate a class of people of whom we should naturally be suspicious? In any event, what made our former immigration profitable was the money and effects which settlers brought with them, whereas a considerable portion of any immigration that may come to us after the war will likely be refugees.

My judgment, therefore, is that we should prepare ourselves for a period, not necessarily of hard times, but of tension, that will call for all the resourcefulness and enterprise we can command. I feel it will be a period that will witness on a considerable scale the weeding out of inefficiency, and place us under the necessity of cheapening our methods of production and improving the quality of our products. For this reason I attach great importance to the

proposal that we should equip ourselves quickly and effectively for undertaking research work of every kind related to our resources, and I sincerely hope that plans now under advisement will be brought to early fruition.

Before concluding this address I desire to thank you for the high honor you conferred on me by electing me as President of this Association—an honor undeserved and unsought, but the greatest in your gift, and one which I consider the highest which can be conferred on any man in Canada, as while the Premier has great power and controls in a large measure the destiny of the Dominion, yet his appointment is a political one, while your President's election is by those who control the industrial activities of the country.

I recognise my shortcomings, which have been many, and crave your indulgence for my many omissions, but assure you I did what I could for the advancement of your Association, which I am firmly convinced is one of the greatest, if not the greatest organization for the development of the material resources of our Dominion.

I also wish to place on record my appreciation of the fidelity, zeal and untiring efforts of the officers and staff, and have no hesitation in stating that few, if any, institutions have officers more loyal than your General Secretary and the Heads of the Departments, and I wish to thank them publicly for the great assistance they have rendered me during my term of office.

In moving a vote of thanks to President Henderson, Mr. P. W. Ellis said: "There are three notable events in connection with the activities of our Dominion, the address of the Finance Minister of Canada, the addresses of the Presidents and Managers of our banking institutions, and, not less than either, in our judgment, is the annual address of the President of this organization. The address that we have listened to to-day has well covered the activities of this Dominion, and probably there is no country on the face of the globe whose activities are more varied and are more advanced, when its age is considered. The Manufacturers Association is an organization upon whose shoulders the very greatest responsibility rests. Who will say that we at home are not trying, whether we succeed or not, to do our duty in lessening unemployment during the war, in the consideration of those who must look to us to take the initiative, who must rely upon our ability to fix banking facilities and open up markets, in order that they may be enabled to earn at least something while they patiently await the end of this struggle. Our President has suggested that he is not quite as optimistic as some with respect to what the conditions will be upon the termination of the war. We do know this. When a great wave of self-denial and economy passes over a nation possibilities are extraordinary. After the termination of that great Franco-Prussian war, when France was penalized with an indemnity at that time of one billion dollars, her people liquidated it within three years, by their industry, economy and courage. Let us hope that the impress placed upon the world as a whole will be such that the economy, the industry, the hopefulness and courage of the people will overcome all its disastrous results, and the fearful conditions that are now with us, and that within a measurable time we will return again to the ordinary avocations of our everyday life and to a period of prosperity and of contentment."

Mr. Ellis closed with a warm tribute to the judgment, industry and devotion shown by Mr. Henderson while in office.

In seconding the vote of thanks, Mr. Chown stated that the most important accomplishment during the President's

(Continued on Page 309.)

THE WAR PURCHASING COMMISSION

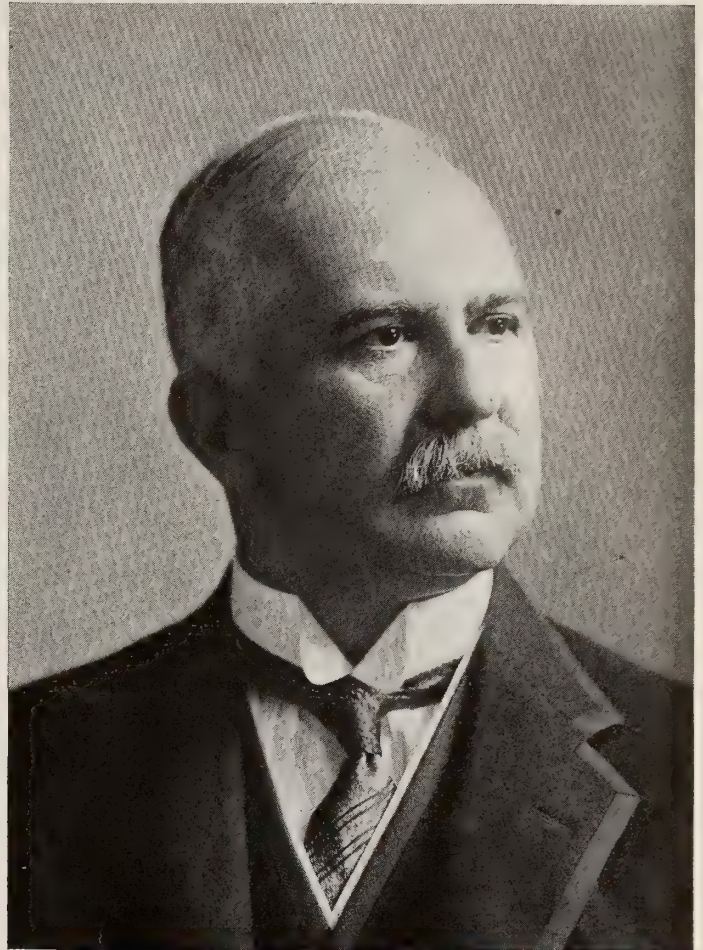
AT the Annual Convention of the Canadian Manufacturers Association, the Dominion Government was warmly congratulated on its action in appointing a Commission composed of Hon. A. E. Kemp, M.P., Chairman; Mr. Geo. F. Galt and Mr. H. La Porte, for the purpose of buying munitions of war. The Commissioners, who are chosen from the three greatest manufacturing cities in Canada, have an immense task before them, and their past records indicate that they will perform it efficiently.

Hon. A. E. Kemp, M.P., the Chairman, is the President of Sheet Metal Products, Ltd., Toronto, and prominent in both industry and politics. As a former president of the Canadian Manufacturers Association he knows what manufacturers can do and how they should do it.

Mr. George F. Galt is the President of the Blue Ribbon Tea Co., Winnipeg, and is thoroughly versed in Western industrial conditions.

Mr. Hormisdas La Porte is the President of La-porte-Martin, Ltée., wholesale grocers, Montreal, and also President of La Banque Provinciale du Canada.

The Commissioners have opened an office in Ottawa and are busy purchasing munitions for the use of our soldiers at home and abroad.

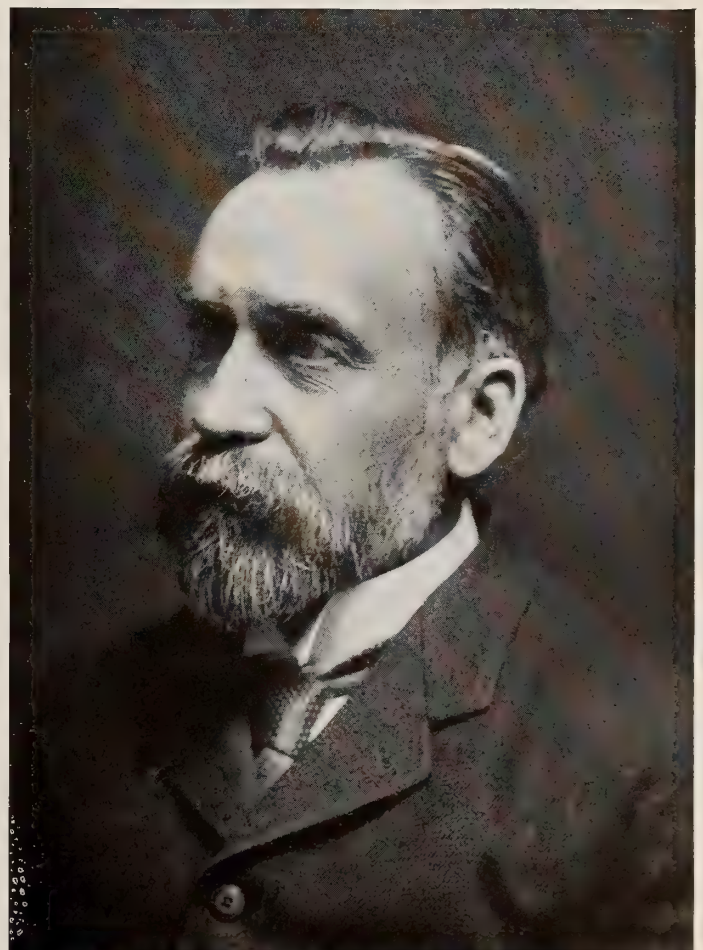


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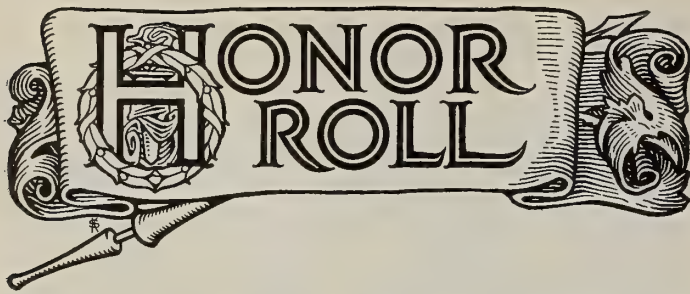
HON. A. E. KEMP, M.P., CHAIRMAN



MR. G. F. GALT, WINNIPEG



MR. HORMISDAS LA PORTE, MONTREAL



THE following members and managers of Canadian manufacturing concerns now on active military service:

NOTE.—Owing to limitations of space, only members and managers of manufacturing concerns can be included in this list. INDUSTRIAL CANADA will be glad to receive additional names.

Col. Chas. Smart, Smart-Woods, Limited, Montreal.

Col. John Gunn, Gunns, Limited, Montreal.

Lieut.-Col. J. Bruce Payne, J. Bruce Payne, Ltd., Granby, P.Q.

Lieut.-Col. Wm. Hendrie, Hamilton Bridge Works Co., Ltd., Hamilton, Ont.

Lieut.-Col. J. L. McAvity, T. McAvity & Sons, Ltd., St. John, N. B.

Lieut.-Col. R. W. Patterson, Winnipeg Paint & Glass Co., Ltd., Winnipeg.

Lt.-Col. Frank Howard, Brantford Emery Wheel Co., Brantford, Ont.

Lieut.-Col. A. B. Petrie, Petrie Mfg. Co., Winnipeg.

Lieut.-Col. G. F. C. Poussette, Assistant Secretary C. M. A., Winnipeg.

Lieut.-Col. J. J. Carrick, Pigeon River Lumber Co., Port Arthur

Lieut.-Col. J. A. Currie, M.P., Imperial Steel and Wire Co., Ltd., Collingwood.

Lieut.-Col. F. C. McCordick, Frank C. McCordick, St. Catharines.

Lt.-Col. E. W. Rathbun, The Rathbun Co., Deseronto, Ont.

Lieut.-Col. A. J. Oliver, R. McDougall Co., Limited, Galt, Ont.

Lieut.-Col. J. F. L. Embury, Canadian Lock Joint Pipe Co., Regina, Sask.

Lieut.-Col. F. B. Black, J. L. Black & Sons, Ltd., Sackville, N.B.

Major F. J. Dingwall, D. R. Dingwall, Ltd., Winnipeg.

Major W. R. Marshall, Standard Fuel Co., Ltd., Toronto.

Major John McPhee, Barrie Tanning Co., Barrie.

Major Wm. Scully, Wm. Scully, Montreal.

Major Kimmins, E. D. Smith & Son, Ltd., Winona, Ont. (Killed in battle.)

Major T. M. McAvity, T. McAvity & Sons, Ltd., St. John, N. B.

Major Pelly, Steel and Radiation, Ltd., Toronto.

Major Russell Britton, Manager Cowan & Britton, Ltd., Gananoque, Ont.

Major W. R. Turnbull, Robert Duncan & Company, Hamilton, Ont.

Major J. K. Bertram, The John Bertram & Sons, Ltd., Dundas.

Major J. R. L. Parsons, Canadian Lock Joint Pipe Co., Regina, Sask.

Major T. C. Irving, Moffat-Irving Co., Toronto.

Major P. R. Hanson, Dunlop Tire & Rubber Goods Co., Ltd., Montreal.

Capt. E. E. Williams, Dunlop Tire & Rubber Goods Co., Ltd., London.

Captain Trumbull Warren, Gutta Percha & Rubber Co., Ltd., Toronto. (Killed in battle.)

Captain Harvey B. Evel, Evel Casket Co., Ltd., Hamilton.

Captain W. D. Greer, Consumers Gas Co., Toronto.

Captain J. T. Duguid, Imperial Steel and Wire Co., Ltd., Collingwood.

Captain F. F. M. Brown, College Press, Ltd., Toronto.

Captain C. R. Crowe, Crowe's Iron Works, Guelph, Ont.

Captain Smith, E. D. Smith & Son, Ltd., Winona, Ont.

Captain F. R. Newman, Canadian Fairbanks-Morse Co., Ltd., Toronto.

Captain J. M. Eakins, Canada Grip Nut Co., Ltd., Montreal, Que.

Captain F. P. Duck, D. Acland & Son, Winnipeg.

Captain G. H. Weld, Farmers Advocate, Ltd., Winnipeg.

Captain W. L. Roblin, Winnipeg Telegram, Winnipeg.

Captain R. Steacie, Smart-Woods, Ltd., Montreal. (Killed in battle.)

Captain George D. McLauchlan, McLauchlan & Sons Co., Ltd., Owen Sound, Ont.

Capt. H. C. Trenaman, Domestic Specialty Co., Limited, Hamilton, Ont.

Captain G. F. Grafton, Grafton & Company, Dundas, Ont.

Capt. R. A. McAvity, T. McAvity & Sons, Ltd., St. John, N.B.

Capt. Victor Nordheimer, The Nordheimer Piano & Music Co., Ltd., Toronto Ont.

Capt. Alexander Campbell, Campbell Steel & Iron Works, Ltd., Ottawa, Ont. (Died of illness).

Capt. Walter A. Harrison, T. H. Estabrook Co., Ltd., St. John, N.B.

Capt. Edgar H. Shuttleworth, J. R. Shuttleworth & Sons, London, Ont.

Lieut. Harvey Cockshutt, Cockshutt Plow Co., Brantford.

Lieut. C. H. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Lieut. K. E. Drinkwater, A. B. See Electric Elevator Co. of Canada, Ltd., Montreal.

Lieut. T. E. Ryder, Canadian Fairbanks-Morse Co., Ltd., St. John, N.B.

Lieut. J. V. Young, Hamilton Cotton Co., Ltd., Hamilton, Ont.

Lieut. W. L. McIntosh, Canon Lake Lumber Co., Winnipeg.

Lieut. W. S. Drewry, E. L. Drewry, Ltd., Winnipeg.

Lieut. G. H. Saltmarsh, Metallic Roofing Co., Winnipeg.

Lieut. Wm. Martin, Jr., Manitoba Gypsum Co., Winnipeg.

Lieut. B. M. Green, Smart-Woods, Ltd., Montreal.

Lieut. Jack Woods, Smart-Woods, Ltd., Montreal.

Lieut. Lacey, Steel and Radiation, Ltd., Toronto.

Lieut. Garret, Steel and Radiation, Ltd., Toronto.

Lieut. P. D. McAvity, T. McAvity & Sons, Ltd., St. John, N.B.

Lieut. E. C. H. Moore, Coleman Baking Powder Co., Ltd., Brockville, Ont.

Lieut. Ian Hendrie, Hamilton Bridge Works, Limited, Hamilton, Ont.

Lieut. Geo. C. Wright, E. T. Wright Co., Limited, Hamilton, Ont.

Lieut. W. H. McLaren, McLaren's, Limited, Hamilton, Ont.

Lieut. H. C. Hatch, Canada Steel Goods Co., Limited, Hamilton, Ont.

Lieut. John Galt, Jr., Blue Ribbon, Limited, Winnipeg, Manitoba.

Lieut. R. G. Hutchinson, International Harvester Co., of Canada, Ltd., Calgary, Alta.

Lieut. Donald S. Fisher, Enterprise Foundry Co., Sackville, N.B.

Sergeant Harold Rolph, Rolph and Clark, Ltd., Toronto.

Sergeant W. A. Logie, Smart-Woods, Ltd., Winnipeg, Man.

Corporal A. R. Ackerman, B. F. Ackerman, Son, & Co., Peterboro.



THE FIGHTING McAVITYS

Four Members of the Firm of T. McAvity & Sons, Ltd., St. John, N.B., who have answered the call of King and Country

Corporal Stewart L. Young, Young-Thomas Soap Company, Regina, Sask.

Pte. Murton Rugg, E. W. Rugg Co., Winnipeg.

Arthur H. Coles, Edmonton Law Stationers, Ltd., Edmonton.

Pte. A. C. Bertram, The John Bertram & Sons Co., Ltd., Dundas.

Pte. Norman V. Cliff, Toronto Salt Works, Toronto.

Pte. Alex. G. Rosamond, Rosamond Woolen Co., Almonte, Ont.

EX-PRESIDENT'S ADDRESS

(Continued from Page 306.)

tenure of office was the conference between the manufacturer and farmers in Winnipeg. "You have held out the hand," he said, "to the largest industry in the country, the agricultural interest. We as manufacturers have been to some extent placed in a position of opposition to the agricultural interest, and you in your address have emphasized the fact that we are not in opposition, but we are both working for the same end. At the conference held in Winnipeg, instead of two bodies standing apart, each antagonistic, fighting for his own, we now recognize there are many things in which the interests of the two are identical, and each can help the other. We have established a precedent from which we can go on and work as two bodies, but with one object in view, and that is the advancement of our country."

The vote of thanks was carried unanimously on a standing vote.



Mr. G. M. Murray, General Secretary, C.M.A. (on the left), happy that the last Business Session of the Convention is over.

HOW CANADIAN MANUFACTURERS MAKE SHELLS

General Bertram, Chairman of the Shell Committee, in his Address to the Annual Convention in Toronto, Showed how a Great New Industry had been Developed by the Necessities of War

TO-DAY, Canada, as part of the British Empire, is engaged in the greatest war that the world has ever known. It is not the lot of every man to be able to go to the front. The man who stays at home, provided he bends his energies in the right direction, can render equally as effective service in the cause of right and justice, as represented by the Allies in this war, as the man behind the guns or the ones who are actually serving



International Press Photo.

GENERAL BERTRAM
Chairman, Shell Committee

in the trenches. This remark applies equally to the employer and the employee.

In this connection, may I make one brief citation from a recent statement by a man who stands high in the councils of the Empire—a man whose name is revered by every patriotic Britisher—I mean Lord Kitchener. Only the other day the Secretary for War, from his office at Whitehall, sent out this statement to the people of the United Kingdom:

"I have said that I would let the country know when more men were wanted for the war. The time has come, and I now call for 300,000 recruits to form new armies.

"Those who are engaged on the production of war material of any kind should not leave their work. It is to men who are not performing this duty that I appeal."

My chief object in addressing you to-day in my capacity as chairman of the Shell Committee is to let the people of Canada know what the Dominion is doing in the manufacture of munitions of war. It is surprising what little knowledge men have of our work; men of ordinary intelligence who, through the public press, should certainly be cognizant of the situation as it exists to-day in this country. For instance, I read in an Ottawa newspaper last week a long editorial written by a gentleman in his office, which is situated within two blocks of the headquarters of the Shell Committee, telling the Government what should be done to organize the manufacturers of Canada. Although we have been at work for several months, and so far have produced and shipped 650,000 shells, evidently it has not dawned upon this gentleman that the Government, as well as the manufacturers of the Dominion, were alive to the necessities of the situation and were doing their respective parts loyally and enthusiastically.

Tribute to General Hughes.

I am not here as an apologist for Major-General Hughes. He needs no apologist. To the Minister of Militia, and to him alone, belongs the credit of initiating the work for the organization of the manufacturers in Canada in a way that they were never organized before in one particular industry. General Hughes is the pioneer of this work in the Dominion; the members of the Shell Committee are simply the means by which he is carrying out this effective work and splendid service for the Empire. I say nothing of the zeal and enthusiasm with which he mobilized, equipped and dispatched 33,000 men from Canada in seven short weeks after the declaration of war, and since then has sent across the seas an equal number. That in itself is a magnificent achievement, and only in slightly lesser degree will the credit accrue to him for showing the way to the engineering firms of England, Ireland and Scotland, as well as other portions of the Empire, to the manufacture of those munitions without which no war can be successfully carried on. You all read the other day the stirring words of Lloyd George at Manchester. I am glad to know that the factories of Britain are now being systematically organized for the production of ammunition, even after the lapse of so many months. General Hughes was the first man in Canada to grasp this idea.

The Beginning of Shell Making.

Shortly after the war broke out the Minister received an order from the British Government for supplies of arms and ammunition. Contracts were placed for these both in Canada and the United States, and then came the request for 200,000 shrapnel shells, unloaded, in equal numbers of 15 and 18-pounders. Canada possesses in the City of Quebec a modern plant for the manufacture of shells, but its capacity is limited. It can only produce 75 shells per day, which we now see was quite inadequate to meet the demand. There was only one thing to do. The Minister of Militia conceived the idea of utilizing the engineering factories throughout the Dominion for shell manufacture, and to secure the co-operation of employers and employees

in the engineering trades to take up this patriotic work. As a manufacturer myself, I am free to confess that it was with some reluctance that we responded to General Hughes' suggestion, even though at that time many factories were practically idle. Several manufacturers met the Minister in Ottawa on the 2nd September. At this meeting there were also present Col. C. Greville Harston, Chief Inspector of Arms and Ammunition for the Dominion, and Col. F. D. Lafferty, Superintendent of the Dominion Arsenal at Quebec. We discussed the whole situation freely, and after hearing explanations by Col. Lafferty as to the manufacture of shells and their component parts, and the examination of drawings and specifications, which were fully explained by both these officers, we came to the conclusion that the manufacturers of Canada could and should engage in this work.

The First Organization.

Accordingly, the following week, at a meeting called by General Hughes at the Dominion Arsenal at Quebec, a committee was appointed to organize the movement throughout the Dominion. The members of this committee are: Messrs. Thomas Cantley, of New Glasgow; George W. Watts, Toronto; E. Carnegie, Welland; General T. Benson, Master-General of Ordnance; Mr. J. W. Borden, Chief Accountant and Paymaster-General; Col. Harston and Col. Lafferty, the latter four representing the Department of Militia and Defence. I had the honor to be named chairman of this committee. I accepted the office, because I felt it to be my duty. I had the additional satisfaction of knowing that there were associated with me enthusiastic colleagues who would do their utmost to make the undertaking a success. In this I have not been disappointed. I cannot speak too highly of the splendid work of my associates.

Col. Lafferty undertook the technical instruction of the manufacturers, while to Col. Harston was allotted the equally important duty of superintending the examination and inspection. Before the end of the month we were fortunate to secure the services of Mr. David Carnegie, of London, England, as ordnance adviser. You may realize how fortunate we were in this respect when I tell you that Mr. Carnegie, who is one of the recognized authorities on steel and munitions of war, was for many years in charge of the shell factory at Woolwich Arsenal. He is a Fellow of the Royal Society, Edinburgh, and an active member of the most important engineering institutions in the Motherland. Col. Carnegie took up his duties immediately, and since September last has been on the work day and night.

Must be Made in Canada.

General Hughes was careful to impress upon the committee that to the utmost possible limit the component parts of the shells should be "Made in Canada." This principle we have constantly kept in mind, and I am satisfied that when the war is over, and these establishments cease manufacturing munitions certain industries will have been created in the Dominion of a lasting character, from which the country will receive permanent benefit. For instance, I may mention that to-day the quantity of copper refined and smelted is a mere bagatelle, although in 1914 the country exported approximately 30,000 tons of copper ore in matte form. On the other hand, Canada annually imports 21,000 tons of the refined product. Why should not the work of smelting and refining our native copper ores be done in Canada? You will be pleased to learn that as a direct outcome of the work of the Shell Committee

this will be made possible. Our experience in nine months has demonstrated the fact that the development of this industry in the Dominion, while it would undoubtedly benefit every manufacturer who uses copper, is, above all things, a military necessity. Canada will not have to remain long under the reproach of having to import its refined copper, and I can assure you of this, that within three or four months, we expect to be making in this country, from the native produce, all the copper bands required in the production of shells.

Getting the Steel.

At the outset our work was largely of a formative character. We wanted Canadian steel for Canadian shells. Heretofore none such had been forthcoming. Col. Cantley was entrusted with this work, and the country is under deep obligation to him for having rapidly installed and equipped a plant for producing the first steel made in Canada for shell manufacture. It was agreed to supply all the component parts of shells free of charge to those manufacturers who would undertake the work of finishing and assembling the complete shells. In this way many of the smaller manufacturers were relieved of the financial burden of carrying a heavy stock of the raw materials, and which very largely contributed to the success of this huge undertaking. It was further decided to eliminate unhealthy competition by paying uniform price for the same article. An inspection company was chosen to deal with all shell components, thus relieving the assembling manufacturers of the responsibility of inspection, while at the same time satisfying the Shell Committee beyond question that the component parts of shells were correct in every particular



Snap Shot of General Bertram at R.C.Y.C.

before the finished article passed into the hands of the Government inspector.

Starting with the first order for 200,000 shrapnel, we have since placed orders aggregating 9,000,000 shells, consisting of 15 and 18-pounder shrapnel; 18-pounder, 4.5 inch, and 60-pounder high explosive shells. In addition we have placed orders for 100,000 cartridge cases, 5,000,000 fuses, 2,000,000 primers, and 1,000,000 friction tubes.

Investigating the Firms.

Before awarding a contract careful investigation is made as to the ability of the firm to carry out the particular work assigned to it. If there is any doubt as to the plant being unsuitable, a competent inspector is sent to report upon the state of the factory. You will quite understand that in order to safeguard the interests of the country the committee had to stipulate that contracts placed would be subject to cancellation. Each manufacturer adjusts his own machinery to the particular work assigned to him, and is furnished with a set of inspection gauges as a guide in making the manufacturing gauges required. The preparation of the drawings for the various parts, and the preparation of gauges and their distribution and use involved considerable labor, but we got it done, and done well. To give you an idea of a certain feature of our work, I may mention that the inspection of the various component parts, including the analyses of material, and physical tests call for the employment of over 300 inspectors, besides several chief inspectors. Most of the inspectors are experienced machinists and tool-makers. The final inspection of the finished shell is carried out by nearly 300 examiners and district inspectors, under the direction of Col. Harston. Such an army of inspectors emphasizes the care which is being taken to produce satisfactory results, and which have been highly commented upon by the officials of the War Office. Upon Col. Harston also devolves the actual proof tests, these being carried out at a certain place, the average number of shells fired daily being 300. As soon as the shells have passed examination, and have been packed ready for shipment, the manufacturer receives his cheque.

How Work is Distributed.

In no one single establishment in Canada except the Dominion Arsenal at Quebec is the complete shell made. One hundred and thirty firms, from Halifax to Vancouver, are engaged in the work of machining and assembling. Others are occupied in the manufacture of blanks, bullets, discs, cartridge cases, buckshot, primers, tubes, tin cups for shrapnel, grub screws, sockets and plugs, steel base plates, and boxes. From an enumeration of these various articles it will be observed how extensive the several operations are. At the present time no less than 247 factories are engaged in this work in 78 cities and towns in the Dominion. In Montreal alone 35 factories are employed. Toronto has 28, Hamilton 17, and so on throughout the Dominion from coast to coast. Practically every province of Canada is participating in this enterprise. The manufacture of shells in this country is giving employment to between 60,000 and 70,000 artisans, while the total weekly wage bill easily amounts to \$1,000,000. From these figures you will see what the shell-making industry means to the workingmen, as well as to the manufacturers of the Dominion. The changes which were necessary in the equipment of the various factories by adding new machinery, or in the readjustment of existing plants, were made by the manufacturers themselves and at their own expense. These changes gave employment to many other

factories which were not directly engaged in making ammunition. In the course of a very short time now we shall be producing from between 40,000 and 50,000 shells per day. For the contracts already placed it may interest you to know that 170,000 tons of steel, about 30,000 tons of lead, and several thousand tons of other materials, are required.

High Explosives.

In referring to the various industries covered by the sphere of operations of the Shell Committee, I cannot but make allusion to the investigations conducted at the instance of the Minister of Militia in connection with the supply of propellants and high explosives. In addition to the manufacture of several thousand tons of cordite and powder in connection with the present contract, through his instrumentality an important new industry has been initiated in the Dominion, viz.: the utilization of the by-products from the coke ovens of the Dominion Iron and Steel Company, at Sydney, N.S., for the manufacture of the high explosive, trinito-toluene. The revenue alone from the contract placed with this company will be nearly \$5,000,000. I mention this so as to give the gentlemen present an idea of what has been accomplished in one direction only, but I think you will agree with me that the value of having such an industry in Canada far outweighs any monetary consideration which may be named.

We have endeavored to discover the ability of the various manufacturers to undertake the work, and it has been most gratifying to find not only a readiness to produce ammunition, but an eager desire amongst all to assist the committee in carrying out its duties. The cordial co-operation of both employer and employee has been one of the finest features throughout the strenuous times in which we are now involved. I wish to emphasize here in particular that the backbone of the whole situation is the mechanical ability of our workmen, who have done wonders in developing methods of manufacture which have hastened the production of the finished material. I could speak upon this subject for a much longer period, but I do not wish to weary you. I am sure you will give the Shell Committee credit for having done its best in this national crisis. I will say this, and I am sure every one of my colleagues of the committee will concur, that in our work politics have had no place, and we have been given an absolutely free hand. This is a time of national emergency, in which every true Briton must do his part according to the ability with which he has been endowed. In the patriotic work in which we are engaged I am sure that all those associated with us, the manufacturers as well as the workingmen of Canada, will do their part loyally and enthusiastically until victory has been achieved. I close, as I began, with Lord Kitchener's words:

"Those who are engaged on the production of war material of any kind should not leave their work. It is to men who are not performing this duty that I appeal."

PRINCE RUPERT FAIR.

An effort is being made to induce Canadian manufacturers to exhibit at the Annual Fair of Prince Rupert, B.C., which will be held on September 22nd, 23rd, and 24th, in order to popularize the "Made-in-Canada" propaganda. Arrangements for transportation have been made with the Grand Trunk Railway. The charge for floor space for exhibits will be at the rate of \$1 per foot frontage. An attractive list of prices is published. For further information apply to F. S. Wright, P. O. Box 1657, Prince Rupert, B.C.

AGRICULTURAL PROBLEMS OF CANADA

By DR. C. C. JAMES

An Address Delivered to the Annual Convention of the Canadian Manufacturers Association in Toronto, on May 10th, 1915

IT is not ordinarily considered, or has not been ordinarily considered, that a farmer is a manufacturer. Just as there has been a lack of appreciation along that line so there has been a lack of agricultural development. It has only been when we have got the agricultural community or individual farmers to look upon their industry as a great manufacturing industry and apply to it the same principles that manufacturers apply to their business that we find these men meeting with success. I had the opportunity as an onlooker to attend the Conference when representatives of the manufacturers met the Winnipeg representatives of the great farming Associations of the three Western Provinces in Winnipeg last fall. Up to that time we had been accustomed to seeing manufacturers and farmers meeting either upon the political or some other platform of discussion to see which one could down the other, or perhaps we had more frequently read their controversial letters in the public press. To see between thirty and forty men representing these two classes sitting around a common table, looking one another straight in the eye, talking to one another face to face, and discussing questions in regard to agricultural development from a national standpoint was a new experience. That, in my opinion at least, was an epoch-making meeting. We come to you to-day, representing that same great agricultural class, of the East as well as the West, to ask you to co-operate in this agricultural development upon which Canada depends to a far greater extent than ever before.

The Oldest and Greatest.

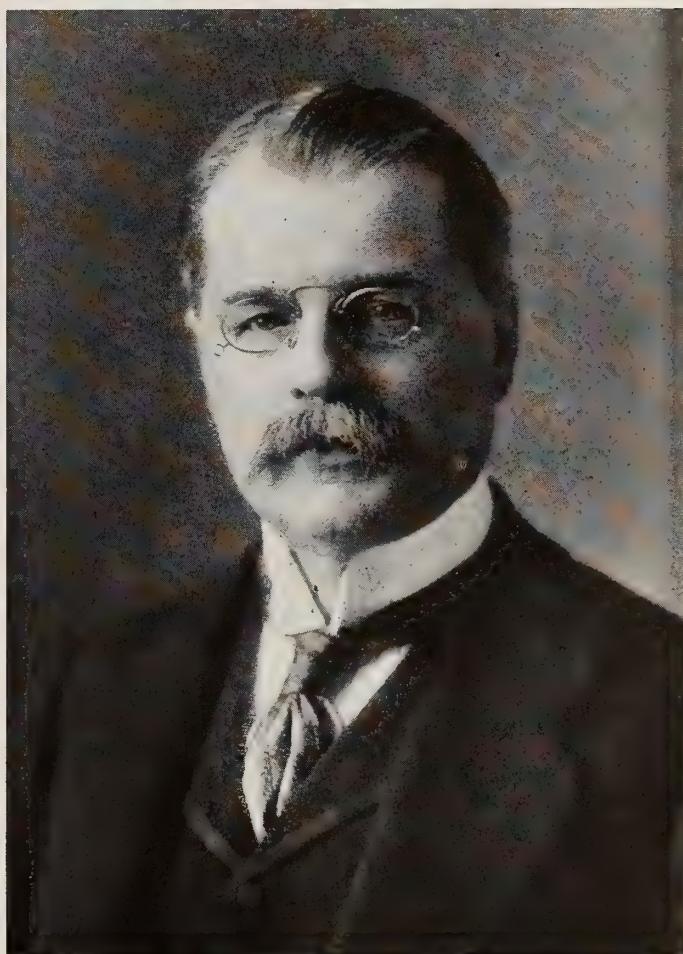
In speaking on behalf of agriculture I am representing the greatest manufacturing industry of Canada. To produce a bushel of wheat is as much a manufacturing industry as to take that bushel of wheat and to turn it into flour; to produce a pound of beef on the hoof is as much a manufacturing industry as to turn it into dressed beef or canned meat; to produce a gallon of milk upon the farm is as much a manufacturing industry as to turn it either into butter or cheese or condensed milk.

Our agriculture in Canada has grown along lines largely of least resistance. There has been more or less direction here and there through Provincial and Dominion Government endeavors. In this great industry there was invested at the last taking of the census the enormous sum of \$4,230,000,000. The probability is that to-day the Canadian farms throughout all the Provinces would be valued at about five billion dollars. What is the output of this great manufacturing industry? The gross output was about \$750,000,000 for the year 1910. Those figures are frequently quoted, but in making that quotation there is an oversight in counting in certain things that are produced upon the farm twice. As near as we can get at it, the net production of the farms of Canada amount annually to somewhere between six and eight hundred millions of dollars. There has been a very large increase since the year 1910. Let us put it only at \$600,000,000 and let us suppose that we could increase that by ten per cent., we would have at once added to the annual income of Canada from our farms \$60,000,000. If we could add twenty per cent. we would add \$120,000,000. Is it possible to add ten, fifteen or twenty per cent. to the great agricultural manufacturing products of this country? It can easily be done if we can get certain things moving along

the right direction, and when we put it in that form it is a matter that comes home directly to the manufacturers of this country just as much as it does to the farmers.

The Old Attitude.

In our earlier days the question of the attitude of the Government and Government aid towards farmers was largely based on that old word, charity. The farmer needs help and



DR. C. C. JAMES

Dominion Government's Adviser on Agriculture

therefore we will give it to him. What we have been trying for the last ten to twenty years is to put things on a new basis entirely so that the question of agricultural production can be presented to the people in our towns and cities just as clearly and forcibly as to the people upon the farms. Never before has this question come home to the people of Canada as it has within the last nine months. When war was declared the first call was for men, followed immediately by the second call for food, and now by the third call for munitions, and we ought as a country to see that none of these three are neglected. While perhaps the public mind may be absorbed in sending forward men and their equipment and in providing munitions of war, this country should not lose sight of the fact that the third great duty is placed upon it. A duty which is also a great opportunity. If we could only add twenty per cent. to

the annual output of the farms of this country, which of course would all be available for export, we would have just enough to pay the annual interest on our enormous debt, Dominion, Provincial, Municipal, industrial, and private. Facing this question and hearing this call that came across the seas from the old land for more food, the Dominion Minister of Agriculture inaugurated a campaign for increased production, which



Eyes Left Watching the Flying Machines in Toronto Bay, C.M.A. Convention

was carried on for some three months during the winter and earlier spring. One object of the campaign was to stimulate greater production in order that there might be more food for the soldier at the front and more food for the people in the British Isles. Apart from that, however, it was felt that this would be a good opportunity to bring out from the farmers themselves a discussion as to their conditions and the difficulties under which they were laboring and perhaps suggest certain lines of operation.

What Was Found.

In the reports that we got directly and indirectly, mainly however from our officers who were in attendance at these meetings, three things stood out quite prominently as being matters of extreme importance and necessity in connection with farm development in Canada.

The first was farm labor. Again in the fall we shall be facing the condition of a great shortage of labor upon the farms when there are tens of thousands of men walking the streets of the cities of Canada looking for work. This country has hardly risen to grasp this situation and its difficulties. Some of the farmers say that the members of the Canadian Manufacturers Association are to a large extent responsible because they have lured these idle men from the country to the towns and cities by paying them larger wages.

We put out certain propositions which were tried on a small scale in the Province of Ontario. Instead of leaving this distribution of labor simply and solely to the head office of the Provincial and Dominion Governments, we organized in the various manufacturing centres of Ontario small offices in charge of competent persons where the farmers of the country and the unemployed of the city could meet regularly.

The Need of Credit.

The second difficulty confronting the agriculture of this country is the great and universal demand for some system of agricultural credit. Here and there of course people say that is a matter for the banks and the banks say that is a

matter for some other organization. The old countries of Europe faced this question years ago. Germany had her system, as also had Denmark, Poland, Belgium, France, Switzerland, and Italy; we can even go to Russia and get some illustration as to how this work can be carried out; but in this new country we have never yet made a successful attack upon or taken full and clear consideration of that question. The great trouble with us in Canada has been that we have had too much land. If we had had a country of one-third or one-quarter the area we possess we would have been making much more rapid progress in our agriculture than we have been making, but we have had so much territory that we spread ourselves out and left production and the development of the rich natural resources we found in these new territories largely to chance.

The Marketing Question.

The third problem that is brought home to us in connection with this investigation is the great importance of marketing. What would manufacturers think if they were to carry on their business without a clear and careful consideration of the markets to which goods were to go? There is one great agricultural product to which we have given particular attention more than to any other and that is wheat. Hitherto, the farmer has produced his oats or barley or wheat or bacon or cheese, trusting there was a market somewhere.

Our greatest manufacturing industry was carried on to a large extent utterly regardless of markets or simply trusting in Providence. The result has been that a great deal of goods has been marketed in the wrong places, at the wrong times, and at wrong prices. One has only to state the great wheat problem to see clearly that the wheat crop of Canada is marketed at the wrong time and therefore the net return to this country is far less than it would otherwise be.



Manufacturers at Royal Canadian Yacht Club, C.M.A. Convention, Toronto

Those are three questions I would commend to you for your individual consideration, something that you can take to your home towns and discuss in your Boards of Trade and in your local manufacturers' meetings and also with the men from the farms in the surrounding country.

It makes but little difference who speaks on the question of agriculture, he will not go very far before he refers to wheat. We have been dreaming about wheat as though the

(Continued on page 380.)

REPORT OF THE GENERAL SECRETARY

THERE are few businesses of which it can be said that they thrive on trouble and hard times, but apparently the business of a commercial organization is the exception that proves the rule. The Canadian Manufacturers Association meets to-day after a period of continuous trade depression extending back for eighteen months, if not longer, and under such circumstances it would probably have occasioned little surprise if your Secretary had been obliged to report a falling off in both numerical and financial strength, and a consequent diminution of activity. That he is able, on the contrary, to assure you of a strengthening of the Association's financial position, of the maintenance of its numerical strength, and of an increase rather than a decrease of useful



MR. G. M. MURRAY

General Secretary Canadian Manufacturers Association

activity, is at once a guarantee of the soundness of the principles upon which your organization has been developed, and a tribute to the loyalty of its individual members.

When orders are plentiful and times are good, the average man of business can afford to regard with more or less equanimity the burdens and exactions imposed by legislation or the arbitrary rulings of service corporations, for he is not without his compensation in other directions. If he supports his trade association he does it from a sense of duty; he may wish it success though he is content to leave the solution of its problems to other hands. But with the pinch of hard times his perspective is altered. The compensations afforded him by a profitable business have disappeared. Burdens that once appeared trivial take on a larger importance; they demand solution if only as a means of reducing expenses. Under these circumstances, he supports his trade association from a sense of necessity; he begins to take a livelier interest in its work, and to feel a desire to share in that work.

The touch of adversity that has brought about this change of attitude on the part of the average private member has, therefore, really been a blessing in disguise. It has stimulated activity in those directions where your organization needed stimulating; it has placed a temporary check upon lines of endeavor that were perhaps less practical than theoretical, and the consequence is that to-day we are able to look back upon a record of useful accomplishments that is certainly not surpassed, if indeed it is equalled, by any other year in our history.

The mere mention of a few of our successes will show how ample is the reason we have for self-congratulation. We have brought about a rapprochement with farming interests in the West, and paved the way for future conferences that will undoubtedly prove mutually beneficial. We have been instrumental in forming a strong company to promote the sale of Canadian goods abroad. We have inaugurated an aggressive campaign to create a preference in the home market for goods made in Canada. We have rendered our membership splendid service by safeguarding their interests in connection with a general revision of the freight classification. We have defeated an attack upon our rights under the judgments of the Railway Board in regard to switching and have had those judgments clarified and extended in our favor. We have checked, temporarily at least, an effort to bring about a general advance in freight rates, more especially on international and export traffic. We have won our appeal to the Privy Council in the John Deere cases, thereby establishing the right of a federally incorporated company to carry on business in every part of the Dominion without let or hindrance from provincial enactments. We have secured important modifications in the Workmen's Compensation Act of Ontario, and succeeded in persuading the Government of Nova Scotia to frame its legislation on this subject in harmony with our views. We have organized the manufacturers of Ontario into a series of Safety Associations for the prevention of accidents, as a result of whose good work it is confidently hoped the assessments can be greatly reduced. We have been represented at every meeting of the Board of Customs and have secured for our members numerous rulings of real value. We have improved and extended our commercial intelligence service, adapting it to the changed conditions brought about by the war. We have memorialized the Government to establish a Commercial Museum in Canada and to lay the foundations for a broad-based system of Industrial Research, on both of which matters we hope for favorable action.

To have done these and the many other things that will be covered in the reports to follow should in itself give us every reason to feel proud of our efforts, but to have combined with these achievements the good fortune to survive a period of storm and stress with our numbers increased and surplus assets augmented should surely fill our hearts not only with pride, but with thanksgiving. The record of the past year establishes beyond all doubt the soundness and the virility of our organization, and points to the probability of a future career of even greater brightness, now that the more general recognition of these qualities is bringing its own accession of strength.

Membership.

It would not be fair, however, to allow you to form the impression that the Association has experienced an evenly balanced growth in all parts of the Dominion. While it has gained in the East, it has lost in the West. Ontario and Quebec show progress in numbers and in activity, the Maritime Provinces in activity only, but west of the Great Lakes there has unfortunately been a loss in both.

So far as the Prairie Provinces are concerned, this showing need cause no uneasiness, for what we call second representatives constitute a much larger proportion of the membership there than elsewhere, and it is from this class that resignations are most likely to come when business conditions dictate a policy of retrenchment. Furthermore, these provinces have been without the services of a Secretary since November last, when Colonel Poussette, the officer in charge at Winnipeg, was called away on war duty. That they should show a loss of membership under these circumstances was only to be expected, but with equal reason they may expect to recover lost ground when their Secretary returns, as we all hope he soon will, to his regular duties.

But in British Columbia our Association has undoubtedly gone back, due partly to the deplorable condition of the lumber industry, from which our membership has always been largely recruited, and partly to the activities of an independent organization of manufacturers, reference to which was made in my report of a year ago. There is no question of rivalry between the two organizations. Nominally we still have a British Columbia Branch, but since the birth of the new Association it has been allowed to become dormant for the reason that as a branch of a national organization, it could not consistently undertake the wider programme of local work which its contemporary mapped out for itself, whereas that contemporary could assume, and presumably discharge with satisfaction all the duties previously appertaining to the Branch. Our attitude towards the new organization has been one of friendliness, coupled with proffers of assistance wherever and whenever such assistance would be welcome. Meanwhile any consideration of a consolidation of interests would be premature.

In passing it may be stated that our membership in British Columbia, even at high-water mark, never ran much over one hundred, so that from a revenue standpoint the problem is not a very serious one. It is desirable, however, that our Association should at all times be in a position to voice the attitude of manufacturers generally upon matters of national importance, and for that reason it is to be hoped that our roll of membership will always embrace a fair representation from the Pacific Province.

Industrial Canada.

The prevalent industrial conditions have somewhat adversely affected the earnings of INDUSTRIAL CANADA during the year. During the stress of the past few months some of our oldest and most valued advertisers have felt compelled to withdraw from our pages. It is a source of genuine satisfaction, however, to be able to report that our members generally have shown the utmost loyalty and generosity to the Association's paper. Many have continued their advertisements with INDUSTRIAL CANADA after they had withdrawn from all other publications, while some of those who have discontinued their space have expressed their intention of resuming it as soon as business conditions permit.

The financial statement shows in detail the earnings and cost of publication of INDUSTRIAL CANADA for the year. The earnings were \$26,675.63, as compared with \$28,922.81 for the preceding year, the net profits showing a shrinkage of only \$706.89.

It is worthy of note that while the expenditures on INDUSTRIAL CANADA have been scrutinized with greater care than ever, no reduction has been made which would result in a decrease in the usefulness of the paper. On the contrary, after the commencement of war, when it became necessary to readjust business relationships INDUSTRIAL CANADA spared no expense in securing valuable and reliable information covering trade openings not only in Canada, but in every country with which it was possible for Canada to do business. By arrangement with the Trade and Commerce Department analyses were published of German and Austrian export trade and the trade of the Allies. The four special sections dealing with Transportation, Insurance, Tariff and Legislation devoted special attention to subjects related to the war. Constant support was given to the "Made-in-Canada" campaign, and the necessity of reducing the imports of manufactured goods of a class or kind produced in this country was emphasized by articles, statistics and illustrations. In addition to these special matters, INDUSTRIAL CANADA endeavored, as far as space permitted, to keep abreast of current industrial topics and to continue its advocacy of those policies which have been proved to be beneficial to the national welfare.

That its efforts throughout were appreciated is shown by the fact that articles and statistics had frequently to be reprinted for general distribution.

Individual Service.

What has been said of INDUSTRIAL CANADA in the matter of service applies with equal measure to every other department at head office. We have aimed this past year, more than ever before, to constitute ourselves a bureau of information on every subject about which a business man might wish to enquire. In the pursuit of this aim we have greatly extended and amplified our file of records. In the Transportation Department, for example, we have added a complete transcript of the proceedings in the general enquiry into Western freight rates, also in the applications of the railways for permission to make a general advance in rates in Eastern Canada. Every traffic order of the Board of Railway Commissioners is kept on file and indexed for instant reference. Similarly in the Tariff Department we have a record of every Board of Customs decision and every Departmental ruling. We can advise as to the rate payable upon any article when imported into any country in the world and tell an enquirer what articles are contraband of war and what articles are prohibited to be exported from any country. So also with the Legal Department, the Insurance Department and the Commercial Intelligence Department; we have endeavored to keep them all equipped with the records necessary to an up-to-date service, and to hold ourselves in a position where, besides giving information, we could also give advice.

New Work.

This strengthening of our regular service has in itself occasioned enough extra work to mark the year out as quite a busy one, yet in addition thereto we have found time for the discharge of a number of new duties, calling for much careful thought and involving a great deal of labor.

The campaign of advertising in support of the Made-in-Canada idea made heavy demands upon the time of your Secretary over a period of nearly six months. The selection of mediums, the preparation of copy, the editing of readers, the suggesting of subjects for cartoons, all presented problems of policy which called for constant personal supervision. The securing of funds to pay for the campaign would, it was

thought, prove comparatively easy, but contrary to expectations it proved to be a long and arduous task.

The possibilities offered by the war for increasing our export of manufactured goods suggested another line of useful endeavor to which your staff gladly lent themselves. This first took the form of organizing, or attempting to organize, syndicates of members, always of course looking to economy in the pooling of expenses, and sometimes with a view to being able to show a large aggregate capacity that would compel recognition. Subsequently it was conceived to be the duty of the Association to form from among its membership a joint stock company for the more active prosecution of Canadian trade abroad. The preliminary work of arousing interest in the project fell largely upon your staff and those whose services they specially enlisted, and until the appointment of the Provisional Directors and temporary Managers just a few weeks ago, it was a daily charge upon their time and thought.

Still another task that made heavy additions to the work of your office staff has been the organization of Safety Associations under The Workmen's Compensation Act of Ontario. Some twenty-five of these are now either formed or in process of formation. As several meetings are required before any one can be said to be properly organized, and as some of them have a nominal membership of over 800, it will at once be appreciated how much effort has had to be expended on this one matter alone.

I mention these things as illustrating a phase of our Association's usefulness that is seldom appreciated as fully as it should be. Many a desirable movement that lies outside our proper sphere might never see the light of day without the initiative which we are able to supply, and without the confidence we are able to inspire. Each year brings its own opportunities for this kind of work. The particular tasks referred to may find no place in our programme for 1916, but they will doubtless be replaced by others possessing equal potentialities for Canadian manufacturing industry.

Some of our regular lines of work, on the other hand, have been prosecuted with less vigor than usual owing to their being overshadowed by problems arising out of the war. Technical education, for example, has received scant attention at our hands this year. We have devoted some attention it is true to industrial research, but as regards the enlargement and the improvement of our school system along technical lines, we felt that a more favorable time for quickening public interest would be presented after the return of normal conditions.

In the field of insurance, we have continued our customary service without any attempt at expansion. The problem of fire prevention is one that we must confess to having neglected, and upon it we really ought to concentrate some of our best energy during the coming year. Meanwhile the way for such action has been cleared by the Department having at length freed itself from the worrying details incidental to the liquidation of the Mutual Insurance Company formed under the auspices of the Association some years ago.

The Staff.

The Association staff has had to be slightly augmented during the past year, due to the increasing volume of work to be done, but apart from these additions there have been very few changes. The growing importance of our commercial intelligence service suggested the wisdom of centralizing and systematizing it in a new department, of which Mr. A. Marshall was given charge. The formation of a Maritime Province Branch to supersede the old Nova Scotia

Branch was followed by a change in the Secretaryship, Mr. A. G. Robb succeeding Mr. R. V. Harris. The Secretary of the Quebec Branch, Mr. Georges Morisset resigned at the annual meeting of the Branch, and Mr. Raoul Renault was appointed in his place. In British Columbia, owing to the conditions already referred to, the services of a salaried Secretary have been dispensed with.

With one or two minor exceptions no salary increases have been granted, nor indeed have any been asked. Members of your staff have shown themselves quite willing to forego any claim of that kind which they might have on your consideration, and have even applied themselves to their respective duties with fresh zeal and greater effort, in order that the efficiency of the service might be maintained without adding to your fixed charges.

The hand of death has fallen heavily upon our membership since our last Convention, and to-day we miss the face and voice of many a one who proved himself a warm friend and a wise counsellor in the days that are gone. We mourn in particular the loss of two Past Presidents, Mr. W. H. Rowley of Hull, and Mr. Robert Munro of Montreal, and a Past Chairman of our Transportation Committee, Mr. J. H. Housser of Toronto. The shocking tragedy of the Lusitania claimed at least two of our members, Mr. G. R. Copping of Toronto, and Mr. J. M. Young of Hamilton. Mr. A. R. Clarke of Toronto, a member of our Executive Committee, was among those who providentially escaped, and the good wishes of the Association were promptly cabled him. We deeply regret that Mr. K. J. Morrison, President of the Manufacturers Association of British Columbia, was drowned, and our sympathies are extended to the manufacturers of that province, who have lost one of their most efficient and popular members.

To many members has come the opportunity of a useful career in the service of our King and country; to some has already come the honor of a glorious death on the battlefield in Flanders. Under instructions from the Council, we opened an Honor Roll in INDUSTRIAL CANADA for the names of members who enlisted for active service, and while we fervently hope that the losses subsequently to be reported will be small, the very costliness of such sacrifices as may be made will surely give us cause for pride.

In concluding this report, permit me to express for the other members of the staff, as well as for myself, our grateful appreciation of the support and the consideration you have given us throughout the year. We on our part have endeavored to justify your confidence and to merit your approval, but we fear that under the exceptional conditions which have prevailed our shortcomings may at times have been all too apparent. If they have we crave your indulgence, and frankly bespeak that criticism without which we cannot hope to serve you satisfactorily.

All of which is respectfully submitted.

G. M. MURRAY,
Secretary.

In moving the adoption of the Secretary's report Mr. Thomas Roden refuted a charge brought against the Association by the trade unions.

Not Hostile to Labor.

"There is a feeling abroad amongst the labor organizations that we are banded together to some extent to oppose labor," said Mr. Roden. "By this report it will be seen that we are here interesting ourselves in all the activities that

will help labor as well as help the Association. The desire of all members of the Association, I believe, is to co-operate in the development of our country, and in doing that we are aiding labor as well as ourselves. While we did not see eye to eye with labor in some of the demands made in the Workmen's Compensation Act, we were doing what we thought was equitable for the future carrying out of this plan, and we should have recognition from the labor organization. I am

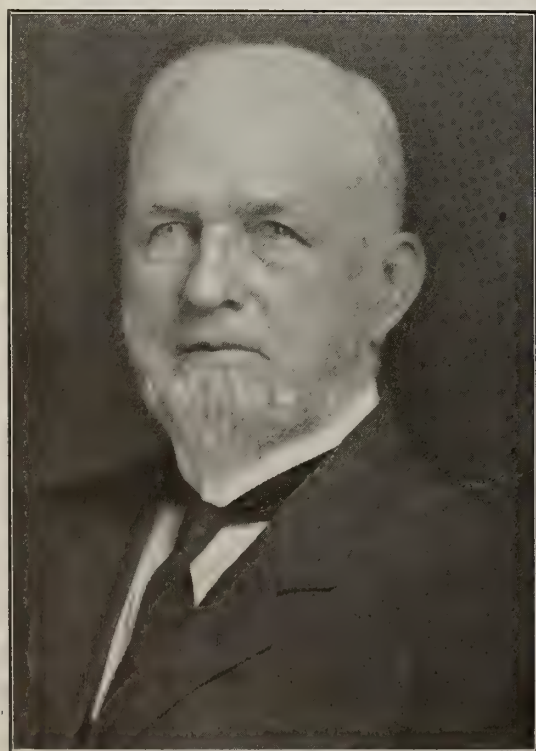
emphasizing this because so often we are faced with criticism from them, and I feel it is unjust, and it is so seldom we have the opportunity in a public manner of expressing ourselves."

Mr. Alex. Saunders, in seconding the adoption of the report, emphasized the necessity of Canadian manufacturers engaging in export trade, but warned them that their plans should be made with prudence and efficiency if they hoped to attain success. The report was adopted.

AVDITOR'S REPORT

BALANCE SHEET, 30TH APRIL, 1915.

30th April, 1914.	30th April, 1915.
LIABILITIES.	
\$21,734.11 Fees paid in advance and unearned	\$20,931 26
3,559.53 Accounts payable	2,232 87
379.03 Toronto branch—special suspense	211 79
<hr/>	<hr/>
\$25,672.67	\$23,375 92
1,650.00 Reserve for depreciation, furniture and fittings	2,000 00
43,180.69 Balance surplus assets	45,245 90
<hr/>	<hr/>
\$70,503.36	\$70,621.82



MR. GEORGE BOOTH

Booth Coulter Copper & Brass Co., Limited, Toronto
Re-elected Treasurer C.M.A., 1915-16

ASSETS.

\$20,392.80	Cash on hand and in bank..	\$11,575 87
31,513.56	Investments at cost—Schedule "C"	40,894 56
713.33	Interest accrued on above . . .	641 27
<hr/>		<hr/>
\$52,619.69		\$53,111 70
\$8,804.58	Accounts Receivable—Advertising	\$7,962 63
51.50	Accounts Receivable—Trade Index	12 75
703.70	Accounts Receivable—Legal Dept.	695 60
241.50	Fees accrued and due	646 74
<hr/>		<hr/>
\$9,801 28		\$9,317 72
1,000.00	Less Reserve for Bad Debts.	1,000 00
<hr/>		<hr/>
\$8,801.28		\$8,317 72
\$2,000.00	Advance re Test Case Extra Prov. Corporations	
	Advance re Workmen's Compensation Act	\$850 00
	Made-in-Canada Campaign	1,077 16
7,082.39	Furniture and Fittings	7,265 24
<hr/>		<hr/>
\$70,503.36		\$70,621 82

Audited and found correct,

WILTON C. EDDIS & SONS,
Chartered Accountants.

REVENUE ACCOUNT.

For 12 months ending 30th April, 1915.

1915.	
April 30th.	
To Expense—Schedule "A"	\$58,975 31
" Bad Debts	128 34
" Depreciation of Furniture	350 00
" Extra Provincial Corporations Test Case	2,875 52
" Workmen's Compensation Act	770 95
By Membership Fees	\$56,296 59
" Interest	2,246 81
" INDUSTRIAL CANADA—Schedule "B"	6,467 54
" Trade Index, 1913	154 39
To Profit for 12 months—carried down..	2,065 21

\$65,165 33 \$65,165 33

1914.	
April 30th.	
By Balance	\$43,180 69
1915.	
April 30th.	
By Profit for 12 months	2,065 21
By Balance carried to Balance Sheet	\$45,245 90

SCHEDULE "A."

EXPENSE ACCOUNT.

For 12 months ending 30th April, 1915.

Annual Meeting, 1914	\$1,212 86
Branches:—	
British Columbia	\$118 75
Hamilton	579 14
Manitoba	26 00
Montreal	5,296 49
Nova Scotia	713 76
Quebec	163 55
Toronto	1,778 98
	<hr/>
	\$8,676 67
Certificates	280 74
Counsel Fees	557 50
Departments:—	
Insurance	1,999 92
Legal	6,457 13
Tariff	6,895 56
Transportation	9,896 33
Exchange	114 66
Labour Committee	1,700 00
Postage	637 06
Printing and Stationery	652 04
Receptions	61 15
Rent and Light	1,118 04
Salaries	12,276 61
Sections	308 68
Sundries	419 85
Telegrams and telephones	438 59
Translations	207 89
Travelling	1,383 76
Winnipeg Office	3,646 77
Montreal Office	33 50
	<hr/>
	\$58,975 31

SCHEDULE "B."

INDUSTRIAL CANADA.

Statement showing Receipts and Expenditures for 12 months ending 30th April, 1915.

EXPENDITURE.	
Electros	\$338 93
Special Literary Matter	327 00
Postage and Distribution	1,038 12
Printing and Stationery	10,785 27
Rent and Light	1,100 04
Salaries	6,021 23
Telegraph and Telephone	63 69
Travelling	208 31
INDUSTRIAL CANADA Prizes	270 00
Sundries	55 50
	<hr/>
	\$20,208 09
Profit for 12 months	6,467 54
	<hr/>
	\$26,675 63

RECEIPTS.

Advertising—Display	\$24,849 26
Advertising—Buyers' Guide	1,698 56
Sale of Copies	127 81
	<hr/>
	\$26,675 63

SCHEDULE "C."

INVESTMENTS.

	Par Value.	Cost.	Rate of Interest.	Due Date.
City of Toronto				
Bonds	\$4,866 67	\$4,193 12	3½%	1 July, 1944
City of Hamilton				
Bonds	4,000 00	3,932 00	4%	1 Sep., 1920
City of London				
Bonds	2,000 00	2,017 80	4½%	30 June, 1915
City of Stratford				
Bonds	10,000 00	10,400 00	4½%	1 Jan., 1941
Riordan Pulp and Paper	5,000 00	4,950 00	6%	30 June, 1942
City of Toronto				
Bonds	6,326 66	5,520 64	4%	1 July, 1948
City of Brandon..	10,000 00	9,881 00	5%	1 Oct., 1932
		<hr/>		
		\$40,894 56		

Hon. Mr. Davis, in seconding the adoption of the report, congratulated the Treasurer on his balance sheet.

The Treasurer's Report was adopted.



REPORT OF THE EXECUTIVE COMMITTEE

YOUR Executive Committee, whose chief function is to supervise the business management of the Association's affairs, have pleasure in reporting that, despite a year of unusual strain, the efficiency of your organization has been maintained throughout with no impairment of its financial reserves.

Believing that the worst is now over, your Committee make no secret of the fact that for some months past they have felt very keenly the weight of their responsibilities. The business depression which Canada was facing at the time of our last Annual Meeting, would in itself have justified a feeling of uneasiness, in view of the probability of a loss in membership and a consequent reduction in the revenue from fees. The year was begun, therefore, with a full realization of the need for caution, both in conserving our revenue and in minimizing our expenses.

But the difficulties of a situation already sufficiently serious were increased in number and magnified in intensity by the outbreak of the war. On the one hand, the widespread unsettling and the frequent curtailment of business prompted numerous resignations, to say nothing of the fees that had to be scaled down from a higher to a lower class by reason of the reduction of working forces; on the other hand, that very unsettling of business gave rise to problems that seemed to call for greater vigilance and renewed activity on the part of your officers and clerical staff. Thus a set of conditions that operated in one direction towards a diminution of our earning power, operated at the same time in another direction towards an increase in our expenditures. Under the circumstances, therefore, it will readily be appreciated that the task of your Committee was by no means an easy one.

Happily, however, things worked out better than was expected, due partially to good management in the practice of strict economy, but in a larger measure to good fortune. In some instances, appropriations which it had seemed wise or necessary to vote, were found to be considerably in excess of actual requirements; collections proved much better than the general condition of business warranted your Committee in expecting, while losses, due to resignations, were largely offset by the acquisition of a surprising number of new members.

Without attempting any further trespass upon the prerogative of our good Treasurer, Mr. Booth, whose explanation of our finances will doubtless be given more in detail, we simply wish to point out that after meeting all requirements in the matter of service, and after increasing our reserve for depreciation, we are able to show surplus assets \$2,065.21 in excess of what they were a year ago.

Investment Account.

In July last, with over \$14,000 in the bank, and the certainty of this balance being increased by the heavy collections from fees, due in August, your Committee deemed it wise to add to the Association's investment account, particularly in view of the low price at which first class municipal securities were then obtainable. A purchase was accordingly made of \$10,000, City of Brandon, 5 per cent bonds, due, 1933, at a price to yield 5.10 per cent. interest. As will be seen from the Treasurer's statement, the total of your investment account now stands at \$40,894.56, as compared with \$31,513.56 a year ago.

Contingent Account.

This year for the first time, advantage was taken of a provision in the by-laws to open a Contingent Banking Account for the purpose of meeting payments for current expenses. All moneys received by the Association are still deposited to its credit in a General Account, from which nothing can be withdrawn without the Treasurer's signature. But instead of requiring all accounts to be passed by the Committee before payment, and then to be paid by the Treasurer's cheque against the General Account, the practice now is to obtain from the Secretary each month an itemized estimate of expenses, to approve same after revision, and to authorize the Treasurer to place the necessary amount at the Secretary's disposal in the Contingent Account. All payments made from this Account are vouchered as usual, and have to pass the scrutiny of the auditor, who reports thereon to the next succeeding meeting of your Committee. By this means a great deal of routine work is transferred to the salaried staff where it properly belongs, and although it places upon your Secretary the responsibility for passing upon the reasonableness of most charges incurred, it is the practice of your Committee to reserve for their own consideration all items of an unusual character.

War Contracts.

Just as your Committee's financial problems for the past year have been traceable to the war, and to the disturbed conditions arising therefrom, so, too, have most of their other activities been inspired by the same compelling cause.

Chief perhaps among such activities have been their efforts to encourage honorable dealings and to secure the adoption of satisfactory methods in the placing of war contracts.

In view of the disclosures made before the Public Accounts and other Committees at Ottawa, it is fitting to recall the fact that as early as August 26th last, the official attitude of the Association towards such business as its members might secure from the Government for army supplies, was clearly defined in a circular from which the following is an extract:

"In anything you may be called upon to supply the Government, for the use of those who have gone to the front, remember always that the highest quality of material and workmanship is none too good. If our soldiers are to be shod with shoes of your making, see to it that they are good shoes, for a foot-sore fighter is a poor fighter. Forget, too, that a Government order is an opportunity for an additional profit. Canada's battle is your battle, and you can assist her in no surer way than by seeing that she receives full value for every cent of money she pays you.

"For the time being you are in possession of supplies which sooner or later the people of Canada, your partners in the struggle, will want. Regard yourself not so much the possessor as the custodian of these supplies. No one will ask of you that you release them at a loss, but all will expect of you that you will refrain from converting a national misfortune into an opportunity for private gain."

It may be stated that in this same circular emphasis was laid (1) upon the necessity of adhering as closely as possible to the Made-in-Canada or Made-in-the-Empire principle as a

means of strengthening ourselves for the impending struggle; (2) upon the responsibility resting upon each manufacturer of doing everything within his power to reduce unemployment, even to the extent of sacrificing profits, if by so doing the wheels of industry could be kept turning, and (3) upon the desirability of seeing that the dependents of those who enlisted for service were not left in want.

The Association desires to take no particular credit to itself for having giving expression to such views; but in its own interest, when manufacturers as a class have been unfairly criticised, it wishes this definition of its policy to be recalled and clearly understood. Further, it wishes to take this opportunity of recording its belief that the principles for which it has officially stood have been very generally lived up to by its individual members, the vast majority of whom have made a conscientious effort to assist the cause by giving good value and good service.

Prompted by a desire to make our organization of practical use to those who, struggling under the heaviest kind of pressure and with a very imperfect knowledge of Canadian manufacturing industries, were endeavoring to equip our volunteer army for service abroad, your Committee, through the Secretary, wrote the Honorable the Minister of Militia and Defence, under date September 29th, offering to place the entire facilities of the Association, including its up-to-date office records of Canadian products and their producers, at the disposal of his Department.

In regard to enquiries and orders entrusted to the Government by the Allies, the Association was frequently consulted by the Minister of Trade and Commerce, with results, it is believed that were helpful to the cause and gratifying to Canadian producers. Your office staff had instructions to give such enquiries precedence over every other business and nothing would have given your Committee more pleasure than to see the facilities and information we possess utilized to the fullest extent, in connection with the supply of munitions of any kind.

Less than a month later, on October 23rd, a letter was addressed to the Premier, pointing out that the method of handling war orders was giving rise to a good deal of dissatisfaction. He was informed that, making all due allowance for the fact that some manufacturers might not have had the necessary equipment and that others might not have been able to guarantee satisfactory deliveries, it was apparently true that some had more than their share of business, while other had gone without. In some quarters the impression seemed to prevail that war material could not be sold to the Government on its merits, but only through influence, and it was accordingly suggested to the Premier that the business should be thrown wider open, and placed as far as possible with manufacturers or producers direct, instead of through middlemen, thus ensuring competitive prices and at the same time giving the Government the satisfaction of dealing with responsible parties.

As a means of giving effect to such a policy, the following constructive suggestions were submitted:

(1) That all the requirements of the various Departments of the Government, whether for ordinary or special war purposes, should be advertised, and interested manufacturers invited to tender on their supply.

(2) That a permanent Government sample-room should be opened at Ottawa, with possibly branch sample-rooms in other points, such as Montreal, Toronto, etc., where as far as practicable samples of all goods required would be available for the inspection of contractors.

(3) That in charge of each sample-room there should be an officer to supply enquirers with full information as to any kind of Government requirements.

(4) That in the awarding of contracts it should be a standing rule that preference be given in every case, other things being equal, to Canadian products.

(5) That generally speaking, the policy pursued should be frank and open so as to induce Canadian contractors to quote on any lines they might be capable of producing.

The letter concluded with an offer to give free insertion in *INDUSTRIAL CANADA* to all advertisements calling for tenders from manufacturers, and even to bring out special issues supplementing the regular monthly issue, should such a course be deemed necessary or desirable from the Government's standpoint.

No useful purpose would be served by reviewing the correspondence to which this letter gave rise. Indeed, were it not for the fact that the Association has been criticised for withholding its opinion and its influence in a matter of such deep concern to the country and to its own members, no reference need have been made to the latter at all on this occasion. Your Committee consider it important, however, in view of certain facts that have been elicited by public enquiry in Ottawa, to offer this statement, so that no stigma can attach to the Association for any alleged inaction or indifference.

The subsequent decision of the Premier to centralize responsibility and control in the matter of war purchases in the hands of a Commission of business men is a step upon which we all feel he is to be heartily congratulated. We can also commend the good judgment he displayed in selecting the personnel of the Commission. Whatever the faults and weaknesses of the methods at first employed in contracting for war supplies, they should quickly disappear under the new regime which we believe fully merits the confidence it has so generally inspired.

Export Trade.

Before the war was a week old, there was a noticeable quickening of interest in the question of export trade. Speculation became rife as to the part which Canada was destined to play in supplying the requirements of neutral markets, like the South African Republics, whose communication with Germany and Austria was certain to be cut off.

While the interest thus manifested was at first largely academic, it soon became apparent that Canadian enterprise was ready to seize the opportunity, if properly guided.

As the first step in this direction there were prepared and printed in the September and subsequent issues of *INDUSTRIAL CANADA*, statistics of a comprehensive character, analyzing the export trade of Germany and Austria-Hungary, showing the volume of their business in every important market of the world, and the classes and quantities of goods sold. It is gratifying to be able to state that the survey of the situation presented by our own journal was easily one of the most complete that appeared anywhere, besides being one of the first. For much of the information supplied we were indebted to the Department of Trade and Commerce.

For a time, interest seemed to centre very largely in the trade possibilities of the West Indies and South America, and as a means of enabling these markets to be visited and actively canvassed at a minimum of expense, your Committee suggested by circular letter the formation of syndicates of manufacturers in non-competitive lines, each syndicate to maintain its own selling representative abroad, and to apportion the expense among its members. Your Committee offered its assistance in bringing this about, but com-

paratively few manufacturers responded, though there was no dearth of men claiming to have all the desired qualifications and foreign experience for the selling end of the proposition. After one or two experiments, however, it became apparent that endless difficulties would be encountered in arranging syndicates whose members could work in harmony, and as results at the other end would always be problematical in any event, it was decided to abandon this line of endeavor. Furthermore, owing to the general impairment of credits in South America, following the outbreak of the war, your Committee felt they might more prudently encourage export effort in some other direction.

Meanwhile the demand of the Allies for war supplies was beginning to assume very large proportions, and word was frequently being received of enormous contracts, for uniforms, boots, blankets, saddlery, etc., that had been placed in the United States. Enquiry as to the reason for Canada's failure to secure at first a share of this business elicited the explanation from army buyers that very few of our manufacturing establishments had a capacity large enough to be attractive to them. They were commissioned to purchase huge quantities of supplies and to obtain quick deliveries, and they naturally had to confine their negotiations to firms of the first magnitude.

To meet this situation an effort was made to organize Canadian manufacturers in certain lines of production, so as to be able to offer buyers the combined capacity of a large number of plants. Sometimes this was done by the manufacturers on their own initiative, sometimes under the aegis of the Department of Trade and Commerce, sometimes at the instance of our Association. While the movement did not always prove successful, so far as the actual securing of orders was concerned, it was unquestionably the means of bringing some valuable business to Canada, to say nothing of the fact that the mutual confidences inspired by this plan of co-operative selling should pave the way for bigger and better returns in the future.

While these negotiations were in progress, your Committee was becoming more and more seized of the importance of European markets as affording outlets, both immediate and permanent, for Canadian manufactured products. As already stated, in war supplies alone the demand was enormous. The elimination of Germany and Austria from the import trade of Great Britain, France and Russia, left a gap which it must largely rest with North America to fill. The period of reconstruction in France, Belgium and Poland, following the termination of the war, gave promise of creating a tremendous demand for building material and engineering supplies of every kind. Lastly, and perhaps most important of all, was the fact that Russia, possessed of illimitable resources and a population of 175,000,000, was at length throwing off the yoke of serfdom, awakening to a realization of her possibilities, and shaping for herself a programme of development that singled her out as one of the great future markets of the world.

Upon this latter point your Committee took occasion to communicate its views to the Minister of Trade and Commerce, suggesting the desirability of having Russia visited and its commercial possibilities studied on behalf of Canadian business interests. It was a pleasure to find the Minister thoroughly in accord with the suggestion, and a Commissioner with two or three assistants are already on the ground, preparing a report which cannot but prove of great value.

But it is one thing to see that information as to market possibilities is supplied, and quite another thing to see that that information is properly taken advantage of. Your Com-

mittee entertained little doubt that, if left to individual initiative, Canada's entry into these fields of opportunity would follow, rather than precede the entry of better equipped and more highly specialized manufacturing countries. Her hope, therefore, seemed to lie in effecting a speedy organization of Canadian export interests, under capable management and with adequate financial support. Given such an organization, Government assistance might safely be counted upon, to have its foreign representatives suitably accredited and properly introduced in the most influential quarters abroad, and from that beginning a strategical position could be prepared for Canada, from which she should be able to derive great and lasting advantage.

Conceiving it to be no more than its duty to initiate a movement having such ends in view, your Committee voted a small appropriation for preliminary expenses, and enlisted the services of competent men to develop the project and to bring interested manufacturers together. The result has been the formation of the Export Association of Canada, Limited, the formal launching of which was reported at yesterday's meeting. Your Committee believe that this Association has before it a career of great usefulness for Canada, and of profit to its individual members, and they bespeak for it the financial support and the hearty co-operation of all who may be appealed to for assistance.

Research.

The war has been responsible for a revival of interest in another problem of real importance to Canadian manufacturers, that of industrial research. So long as we could draw freely from other countries for materials necessary to our manufacturing processes, the need for research work on our own account was not felt so urgently, but now that some of these materials are denied us we cannot but regret the short-sightedness of a policy which established us in a position of such dependency. Furthermore, our attention has been directed as never before to the wonderful efficiency of German industry, and particularly to its profitable utilization of so-called waste, and we have been made to realize, by contrast with our own inefficiency and our own wastefulness, that Canada has research problems of her own calling imperatively for solution.

The serious inconvenience caused by the interruption in the supply of German chemicals was what first focused attention upon this important subject. A study of the situation by the Canadian Section of the Society of Chemical Industry, showed it to be surrounded by so many ramifications as to make it impossible for them to cover the field unaided, and they accordingly petitioned the Government to appoint a Commission to investigate the subject from a general standpoint, as indicated by the resources of the country, the necessities of the industries affected and the possibilities of extending the chemical and allied industries of Canada. Your Association was asked to endorse the petition, and with this request your Committee gladly complied.

Concurrently with this action, your Committee arranged for a deputation to wait upon the Government in support of the establishment of a commercial museum in Canada, under the auspices of the Department of Trade and Commerce. While the chief function of such a museum would be to inform our manufacturers and merchants as to the potentialities of the expansion of our industry and commerce, it could be made to supplement in a practical way the results obtained from industrial research. For the purpose of following up these representations, your Committee had a delegation visit the Bureau of Standards at Washington, the Commercial Museum at Philadelphia, and the Mellen Insti-

tute at Pittsburgh, and prepare for the use of the Government a report upon the valuable work being done by these institutions. This report will be featured at a later stage of our programme, as will also the steps that are under way to inaugurate a comprehensive scheme of industrial research, so that further reference to them in the present connection is unnecessary.

Agricultural Conference.

One of the outstanding features of the past year's work was the conference held in Winnipeg last November, with representatives of western agricultural interests. The motive which prompted your Committee to suggest the conference was a desire to assist, if possible, in the preparation and execution of plans to increase Canada's production, partly as a means of enabling her to pay her indebtedness, and partly as a means of strengthening the Empire for the fight to which she was committed. The impression seemed to prevail beforehand that the Association's representatives would suggest the bringing of a much larger area under cultivation as the readiest method of increasing production, but the result of the conference clearly established the fact that the problem of increased production could safely be left to take care of itself once the normal returns from the cultivation of the soil were made to show a reasonable profit, instead of a bare living, if not an actual loss.

Your representatives were glad to join with the agriculturists in urging the Federal Government to appoint a strong commission to investigate, to report upon, and, if possible, to suggest remedies for the grievances which were believed to exist. Thus far the Commission asked for has not been appointed, although there are reasons for believing that it is under favorable consideration. Meanwhile, however, the Minister of Agriculture, on his own initiative, ably seconded by Dr. C. C. James, is rendering most valuable service in establishing our greatest national industry on a more profitable basis, and when the requisite funds are available for the desired investigation, it will undoubtedly be found

that, owing to the enterprise of these men and the officials of the Department, many of the problems are well on the way towards a satisfactory solution.

It is a pleasure to testify to the high opinion which your representatives formed of the leaders of our western agriculturists. All men of marked ability, they are as sincere in their convictions, as they are frankly outspoken in support of those convictions, and yet withal they possess a sense of fairness which makes them desire to enlighten themselves with regard to viewpoints that may differ from their own. From meeting with such men, and from talking over with them problems of mutual concern, your representatives feel that we manufacturers have much to gain, and should this feeling be reciprocated by the farmers, as we hope it is, nothing but lasting good for both our agricultural and our manufacturing industries should result from the regular and frequent renewal of an acquaintance begun under such favorable circumstances.

General Election.

While it has always been the principle of the Association to refrain from committing itself on political issues, your Committee felt they would be neglecting an important duty if they failed to raise their voice in protest, both on business grounds and on grounds of common humanity, against the proposal to force a general election upon the country at a time like the present. A message was accordingly sent the Premier, giving expression to what your Committee felt would be the unanimous wish of the business interests represented by our Association.

All of which is respectfully submitted.

G. M. MURRAY,
Secretary.

E. G. HENDERSON,
Chairman.

Upon the motion of Mr. E. G. Henderson, seconded by Mr. W. B. Tindall, the report of the Executive Committee was adopted.

RECEPTION & MEMBERSHIP

SINCE the reorganization of the Association in 1899, an unbroken series of gains have been indicated in the reports of the Membership Committee. Some years the gain has been small; this year it came perilously near being no gain at all. Had your Committee been obliged to report an actual loss it might have caused disappointment, but hardly surprise, for the severe strain through which Canadian industries have been passing was certain to be reflected in our membership. That it did affect us adversely is borne out by the fact that this past year it has been necessary to accept a larger number of resignations than during any previous year in our history. Yet in spite of that we are still able to show a net increase of eighteen, a result which, under all the circumstances, should be most gratifying.

At the beginning of our fiscal year, the membership stood at 3,043; at the end of the year, 3,061. The applications accepted totalled 267, the resignations, 249. In view of the fact that the time seemed inopportune to engage in any systematic or extensive campaign to increase the membership, the surprising number of applications received may properly

be regarded as a tribute to the growing influence and prestige of the Association. Many of them are doubtless attributable to the activity in which sections of the Association have engaged as a result of war conditions; though as usual the majority are due to the quiet, but persistent efforts of the staff.

Of the 249 resignations accepted, 91 were due to the cessation of business, the discontinuance of manufacturing operations or to liquidations, 17 to amalgamations, and 39 to hard times. Resignations due to such causes leave no room for argument. They are to be regretted, of course, but on the other hand they cast no reflection upon either the efficiency of the Association or its ability to give satisfaction. The remaining resignations, 102 in number, were prompted by a variety of causes; but for the most part they are made up of firms who had to be dropped from the roll because of their repeated failure to answer correspondence.

The following table compares the present distribution of our membership by Provinces, with what it was a year ago:

	1914	1915	Gain	Loss
Prince Edward Island	4	4
Nova Scotia	99	90	..	9
New Brunswick	66	66
Quebec	774	789	15	..
Ontario	1,702	1,751	49	..
Manitoba	253	246	..	7
Alberta and Saskatchewan	50	47	..	3
British Columbia	95	68	..	27
Total	3,043	3,061	64	46

It will be observed that the heaviest loss occurred in British Columbia. The pinch of hard times has been felt more keenly there perhaps than in any other part of the Dominion, though an additional reason for our loss in that quarter is furnished by the fact that British Columbia has developed a Provincial Association of Manufacturers, which



MR. J. W. HOBBS

Consolidated Plate Glass Co. of Canada, Limited, Toronto
Re-elected Chairman of the Membership Committee, 1915-16

operates quite independently from our Association, and some firms believing it an unnecessary expense to pay fees to two organizations, have definitely thrown in their lot with the local one.

The next table shows by Provinces the distribution of our membership as on May 1st, according to the fee paid.

	\$10	\$15	\$25	\$35	\$50	\$100	\$150
P. E. Island	2	2
Nova Scotia	52	14	11	8	3	1	1
New Brunswick ..	34	14	12	2	4
Quebec	365	193	82	64	62	11	12
Ontario	866	379	209	181	89	19	8
Manitoba	174	38	21	12	1
Alberta and Sask.	31	11	2	2	..	1	..
British Columbia.	38	10	6	9	3	1	1
Total	1,562	661	343	278	162	33	22

With this data, it is a simple problem in multiplication and addition to compute the Association's potential revenue from membership fees. It now stands at \$58,540, as compared with \$57,970 a year ago. Under healthy trade conditions, with the membership showing steady expansion, the actual receipts from fees usually exceed the potential revenue indicated at the commencement of the fiscal year; but with the membership practically at a standstill and collections none too good, the probability is that for the coming year we will realize something less than what is shown above.

Branches and Sections.

In the discharge of the duties assigned it under the by-laws, your Committee was called upon during the year to pass upon applications for authority to form two new Branches and two new Sections. One of the Branches was to supersede the old Nova Scotia Branch, and proposed to combine into one organization all members in the Provinces of Nova Scotia, New Brunswick and Prince Edward Island, with headquarters changed from Halifax to Amherst. The other was to embrace members in the Eastern Townships of Quebec, with Sherbrooke designated as headquarters. The Section applications came from the tanners and the manufacturers of fertilizer. After satisfying itself that the proposed organizations had fields of usefulness before them, and that their draft by-laws harmonized with the by-laws of the Association, your Committee granted all four applications. With these additions, the Association now has nine recognized Branches and twenty recognized Trade Sections.

The Future.

While the outlook for the coming year is not particularly bright, it is by no means without features of encouragement. The evidence of strength which we have shown under the adverse conditions prevailing during the past eighteen months would seem to indicate the probability of being able to increase our membership, once the tide of business has definitely turned again towards better times. Efforts are constantly being put forth to organize manufacturers into trade associations or syndicates for the purpose of more effectively competing for war business; similar efforts are being made to bring about organizations for the prevention of accidents. These movements inevitably bring the advantages of our Association prominently to the attention of non-members, and from their activity we may safely look for numerous additions to our ranks. Furthermore, nearly two years have elapsed since the last systematic and extensive campaign for increasing the membership, and in the interval the field of prospects must have become considerably enlarged. The time for a new campaign is, perhaps not yet opportune; but any noticeable improvement in business might profitably be made the occasion for launching one. Providing the situation is carefully watched, and full advantage taken of the opportunities which present themselves to the staff from time to time, your Committee feel that in the coming year we should easily be able to maintain our strength, and possibly to add materially to it.

All of which is respectfully submitted.

G. M. MURRAY,
Secretary.

J. W. HOBBS,
Chairman.

Upon motion of Mr. J. W. Hobbs, seconded by Mr. R. S. Gourlay, the report of the Membership Committee was adopted.

T A R I F F

THE past year will probably retain a unique position in tariff history on account of the extensive increases made in the Customs tariffs of many of the principal countries throughout the world. In Canada the close of the 1913-14 session of Parliament found the Customs tariff of 1907 in force with relatively few changes; and it then appeared unlikely that there would be further important tariff revision until after the Government could thoroughly investigate and consider this country's productive capacity in relation to costs at home and abroad, differences in freight rates, and other factors entering into the composition of a scientific tariff. The outbreak of war, however, had an immediate adverse effect on the revenue of all nations whether they participated in the war or not. The result has



MR. H. H. CHAMP

Steel Company of Canada Limited, Hamilton
Retiring Chairman of the Tariff Committee

been almost universal additional taxation. To supplement losses in revenue through decreased importations, even such a wealthy, neutral country as the United States has been obliged to levy additional taxation called "War Taxes." Australia, British South Africa, and numerous other British countries, as well as European and South American countries have also been compelled to resort to increased taxation. In most of these countries the Customs tariff was the mainstay for obtaining greater revenue. As an instance, the tariff rates of Russia have been increased generally by from 10% to 100%. Canada, affected by the same extraordinary world-wide conditions, which were intensified by our engaging in the war, was compelled to make substantial increases in the Customs tariff.

Tariff Changes of the Budget.

On August 18th, following the outbreak of war between Germany and the United Kingdom, on August 5th, Parliament assembled in an emergency session to decide on necessary war measures. To meet the needs of the Government,

resulting from decreased revenue through decline in importations, and the general dislocation of business, the Minister of Finance presented a number of tariff changes in his budget speech, which was delivered on Thursday, August 20th. These increased taxation, both Customs and Excise, upon spirits, tobacco, coffee and sugar. There were also consequential tariff changes on all important products into the manufacture of which the above commodities enter. These tariff changes are set out in Appendix "B" attached to this report, showing a comparison between the new and old tariff rates. The new rates became effective at once, except those dealing with importations of ale, beer and other alcoholic liquors against which they were made retroactive to the 7th day of August.

As times passed, it became apparent that additional taxation would be inevitable because of the extraordinary conditions arising from the war, and the great falling off in revenue. Consequently the action of the Government during the succeeding regular session of Parliament came as no surprise. The further taxation measures were announced by the Minister of Finance in his budget speech, on February 11th, 1915. They included special taxes on banks, loan and trust companies, certain insurance companies, on certain telegraph messages and passenger fares, a stamp tax on cheques, money orders, letters, post cards, proprietary or patent medicines, perfumery and wines; but, as with most other countries, the Customs Tariff was again made the mainstay for revenue purposes. The tariff changes will be found in Appendix "C" to this report. This new tariff legislation took the form of an all-round horizontal increase in respect to both free and dutiable goods, coal for steam power, raw materials, factory equipment, and manufactured products, of 5 per cent. under the British Preferential Tariff and 7½ per cent. under the Intermediate and General Tariffs. There were however, notable exceptions from the Customs Tariff war tax, exceptions which the public generally approve. These exemptions appear to have been directed mainly to keeping down the cost of living and stimulating agriculture. The exemptions, however, also included educational and hospital supplies, goods specified in Schedule "C" of the French Treaty (the duties under which could not be increased against France without denouncing the treaty), and articles which had been taxed to the limit in the August emergency war session.

While the increase of tariff rates on raw materials, fuel, and factory equipment, and the assessment of other forms of taxation, have disturbed business in various ways, and imposed burdens which increase considerably the costs of manufacturing, your committee is able to state that no objections were made by the manufacturers to these necessary measures for raising revenue. On the contrary, manufacturers were glad to have the opportunity to contribute their share of the burdens which the Government found it necessary to impose for the purpose of maintaining the revenues and of assisting the Empire in the task of carrying the war to a successful conclusion. It has been stated that all this additional taxation is being passed on by the manufacturers to the consumers by making corresponding advances in the prices of their products. Such a statement is not warranted; and overlooks the fact that contracts and trade usages, in

numerous lines of manufacture, render it practically impossible for the manufacturer to make such advances. Where prices have been advanced an analysis of the facts will prove in most cases that such advances were the result of scarcity of supplies. We believe it to be the outstanding fact that the general policy of manufacturers has been not to increase prices unless special conditions made such action imperative. The amount of protection afforded to Canadian products by the Customs War Tariff has been greatly exaggerated. A taxation measure which increases the cost of the manufacturers' raw materials, factory equipment, and fuel for power development, by 7½ per cent. and augments overhead costs with taxes on commercial paper and the like, and then adds in many cases only 5 per cent to the protection afforded finished products, does not take things very far from where they were before the tariff was changed.

German Conventional Tariff.

One of the most important subjects which your Committee had cause to study during the year was a suggestion for the extension to Canada of Germany's Conventional tariff rates conditional on Canada extending to Germany the tariff concessions enjoyed by France under the French Treaty. In connection with such suggestion it was intimated that, failing some satisfactory arrangement along the foregoing lines, Germany would withdraw from Canada the right to her Conventional Tariff rates in a limited range of articles which she had granted to Canada in consideration of our removing the surtax on German goods. The outbreak of the war and the consequent discontinuance of business with Germany would really make it unnecessary to refer in detail to the matter at all; but, at the same time, it may be of general interest to show how one-sided a bargain Germany wanted to drive with Canada. Investigation of the trade between the two countries showed that the advantage of Germany's Conventional Tariff would not materially encourage the extension of Canada's foreign trade with Germany, but, on the other hand, that Germany's trade with Canada would be substantially assisted if her goods were permitted to enter this country under the low rates of duty applying under the French Treaty. Figures furnished by the Trade and Commerce Department at Ottawa showed that our principal dutiable exports to Germany consisted of oats, wheat, bran, wheat flour, lobsters and agricultural machinery, to which Germany's best Conventional Tariff rates already applied. Examples of Germany's lowest Conventional Tariff rates on our likely exports of products dutiable under her tariff follow:

Wheat—35 6-10c per bushel.
 Bran—\$22.00 per ton of 2,000 lbs.
 Flour—\$2.20 per bbl.
 Oats—18 1-3c. per bushel.
 Barley—20 8-10c. per bushel.
 Lobsters—7 2-100c. per lb.
 Salmon—8 1-10c. per lb.
 Bacon—\$3.78 per 100 lbs.
 Condensed Milk with sugar—\$6.48 per 100 lbs.

In view of these German Conventional Tariff rates, which, according to ideas on this continent, are very high duties, and which, nevertheless, were the lowest special treaty rates of duty extended to any country by Germany, your Committee reported, at its meeting on July 20th, 1914, that the proposal would be detrimental to Canada.

Duplication of Departmental Reports.

The Association having been asked for its views on the question of duplication in the monthly statistical reports of the Departments of Trade and Commerce, and Customs, your

Committee considered the two reports, and communicated its recommendations to the Department of Trade and Commerce in a letter, a copy of which is attached to this report, Appendix D.

Foreign Trade Statistics.

The Departments of Customs and Trade and Commerce have rendered great assistance to manufacturers in their studies of domestic and foreign trade possibilities by furnishing special statistics on specified imports and exports. One of the many illustrations of the attentive consideration paid to these subjects is the statement appearing in the November number of *INDUSTRIAL CANADA*, showing details of the various lines of machinery and apparatus imported under the following general headings in the trade reports:—

"Other manufactures, articles, or wares, of iron or steel, or of which iron or steel, or either are the component materials of chief value, n.o.p., \$11,765,265.

"All machinery composed wholly or in part of iron or steel, n.o.p., and iron or steel castings, and iron or steel integral parts of machinery, \$19,789,912."

Australian Tariff Changes.

On December 11, 1914, a new Customs Tariff, making substantial increases in duty, was brought into operation by the Commonwealth of Australia. While the general character of the measure necessarily increased the rates of duty on goods made in Great Britain, the Australian Government nevertheless gave renewed evidence of their loyalty to the Mother Country by continuing, and, comparatively speaking, increasing the preference in favor of goods made in Great Britain. But your Committee regretted to observe that the new tariff maintained the application of the general tariff rates of duty against Canadian products. Since Australia grants a tariff preference to the products of the greatest manufacturing country in the world (Great Britain), it seemed to your Committee that the withholding by Australia of a like preference to Canadian products could not possibly result from fear of any extensive competition from the relatively infant industries of Canada, and that their tariff policy, so far as the preference is concerned, merely expresses in one form their signal loyalty to the Mother Country. But it was only too apparent that the great increase in duties against Canadian products under the new General Tariff could not fail to restrict our already limited shipments to Australia. The manufacturing costs of Canadian manufacturers in numerous cases are greater inevitably than their United States competitors; and as the Australian tariff rates are ad valorem, applying according to value, the effect is to stimulate United States rather than Canadian trade. Such increase in restrictions to trade with a sister colony, particularly in times like the present, when British national sentiment is being rendered united and dominant the world over, was viewed by your Committee with deep regret; and the matter having been studied with care, the Government was advised of the Association's friendly interest in an extension to Canadian products of the tariff preference now granted by Australia to the United Kingdom, conditional on the privileges of our own British Preferential tariff rates being granted to Australia. Your Committee is hopeful that such a development of British relationship may not be long postponed.

Gauge of Metals.

Following the adoption by the Standards Department of the United Kingdom of the "B.G.," or Birmingham Gauge, as the official gauge for iron and steel sheets and hoops, the Association was asked for its views as to the advisability of one official standard gauge being established in the interests of trade in Canada.

From the fact that steel sheets and hoops are not made in Canada, and because some manufacturers buy such raw material in the United States, where different gauges are in use from those in the United Kingdom, your Committee, after investigating the matter and circularizing all members interested, reported its belief that the time has not arrived for establishing standard gauges in Canada.

Appraisements.

At the Executive Council meeting held in August, 1914, the Association, for the purpose of insuring more accurate Customs appraisements, was requested to urge upon the Minister of Customs that all imported goods be held at the great wholesale centres and that the invoices be requisitioned and the goods examined there with such invoices, and appraised for duty purposes before being permitted to go forward for formal Customs entry and clearance at the small interior Custom houses. Your Committee carefully considered that request. It was apparent that the arrangement suggested would necessitate the unloading of goods for Customs examination at such wholesale centres, with the result that irritating delays, because of awaiting invoices, etc., could not be avoided, and that such a system would be equivalent to withdrawing Customs facilities from all other ports and outports in Canada, because if goods were held at the wholesale centres awaiting receipt of the importers' invoices and then unloaded to be examined and appraised, it would be simpler for the importer to pay duty and clear the goods at the same time. Your Committee took the view that it should not recommend any action which would have a tendency to depreciate or withdraw the Customs facilities now granted to manufacturers and business men in our smaller cities and towns. But as it was the view of influential members of the Association and also of members of the Tariff Committee that in numerous cases imported goods never have been and are not now sufficiently examined for appraisal purposes, and having in mind the greater uniformity of appraisements in respect to textiles as made by the expert travelling textile appraiser, appointed some time ago, your Committee decided to urge that the Appraising Departments at the great wholesale centres in Canada be strengthened by experts in each important line of goods, as, for example, an expert on boots and shoes, another for ladies' wear, etc., and that there should be expert travelling valuers for each important line, who would regularly visit these smaller ports to examine invoices and the goods they cover. To this end the following resolution was approved by the Association:—

Resolved, That the Minister of Customs be petitioned to take such steps,

1. As will provide the Appraising Departments, at all the larger wholesale centres in Canada, with a staff of expert appraisers, assistant appraisers, and expert examiners for each important line of imports, adequate for a thorough discharge of the duties devolving upon such departments, having in view the proper protection both of the Government's revenues and of the interests of the Canadian producer;

2. As will give the Appraising Departments at all smaller ports the advantage of expert advice from travelling appraisers in each important line of imports, thus providing them with needed technical assistance such as they have heretofore enjoyed only in the case of textiles.

Your Committee would report their belief that this matter will receive due consideration by the Minister of Customs as soon as possible.

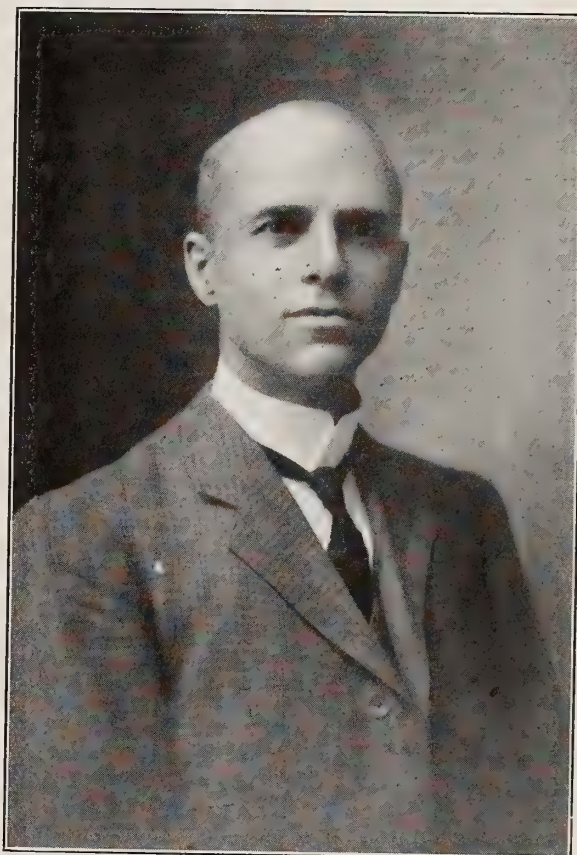
Exports Prohibited on Account of War.

An extensive list of goods, the export of which is prohibited except under special conditions, was issued by the

Dominion Government April 30, 1915, and published in the May issue of INDUSTRIAL CANADA. While the Association supports fully the policy which the Government find necessary to take in the interests of the British Empire, it is realized that nothing can be further from the intention of the Government than to effect the closing down of any domestic industry if it can be proved that a permit to export will not assist the enemy nor detract from efficiency in the furnishing of supplies for Britain's prosecution of the war. The advice of this Committee can be obtained by any member of the Association who feels that he has a case which comes within these limits.

Customs Rulings.

The Tariff Department has reported the Customs Rulings which will be found in Appendix "A," all of which have received consideration of your Committee. The members of



MR. J. R. K. BRISTOL

Manager, Tariff Department

the Association who were affected by these tariff ratings were written to and in addition full announcements thereof were made in INDUSTRIAL CANADA.

Special Tariff Information.

Your Committee has complete files on the Tariff and Customs regulations of each British colony and foreign country, and information on these subjects can be secured at any time from the Association's Tariff Department by members who are engaged in foreign trade or who purpose engaging in foreign trade.

Drawback of Customs Duties on the Exportation of Canadian-made Goods.

In regard to the Customs War Tariff increases of 5 per cent. under the British Preferential Tariff and 7½ per cent. under the General Tariff for emergency war revenue purposes, your Tariff Department has received numerous inquiries as to

whether drawback is obtainable of 99 per cent. of such duties when paid on imported materials or articles used, wrought into or attached to articles made in Canada and exported. The fact, therefore, may bear repetition that the law and regulations enable manufacturers to obtain drawback of 99 per cent. of all duties whether regular or special or dumping duty, or Customs war tariff, when paid on imported materials used in manufacturing goods in Canada for export. These are necessary provisions in the law to enable Canadian manufacturers to compete in export markets with manufacturers in other countries, because all manufacturing countries, including the United Kingdom, allow drawback of Customs duties paid on imported materials used in manufacturing for export. The Tariff Department of the Association can furnish members interested with full particulars on such drawback regulations.

Use of Department.

In conclusion your Committee beg to once again place the Tariff Department of the Association wholly at the disposal of each of our members who may believe that any Customs officer has a misunderstanding of the interpretation of the regulations in regard to rates of duty, values for duty, refund claims on account of duties overpaid through error, or any other Customs matter. Such a member by applying to our tariff officer, will obtain immediate and prompt attention. Moreover, each such member can have the further assurance that no matter what may arise in the future his communications with our tariff officer will be regarded as personal and not brought before the Tariff Committee unless the subject raised is one of general policy in connection with our membership, and provided the member has signified his wish that his case be taken before the Tariff Committee.

G. M. MURRAY,

Secretary.

H. H. CHAMP,

Chairman.

J. R. K. BRISTOL,

Manager Tariff Department.

APPENDIX "A."

Board of Customs Duties.

Cummer's patent ore dryer ruled to be dutiable under Item 453. This decision sustains precedents already established by the Board to the effect that under the Customs Tariff of Canada, 1907, in respect to machinery of all kinds, there is no authority for the free entry of ore dryers.

Dental switchboards ruled not to be free as "surgical instruments," but to be dutiable as electrical apparatus, under Item 453.

Tweezers, per samples, declared to be dutiable according to material, and not free as surgical instruments.

Aspirin held to be a proprietary preparation, which, being recognized by the French Codex as official, is thus excluded from Tariff Item 220 and dutiable under Tariff Item 711.

Soft Rubber in sheets (per sample) dutiable under Tariff Item 618. This soft rubber in sheets compares in appearance with prepared rubber in sheets as required for manufacturing rubber stamps, etc.

Rubber Insoles and Heels for use on boots and shoes (per sample), Tariff Item 618.

Malt Nutrine (per sample), manufactured by Anheuser-Busch Brewing Association, Tariff Item 220.

Addressographs and typemaking accessories therefor, manufactured by the Addressograph Sales Company, Chicago, declared to be dutiable under Tariff Item 442. Ruling in effect from 1st July, 1914.

Chick Chick egg dye, per sample, being paper saturated with dye stuff, declared to be dutiable under Tariff Item 199.

"Ingle" grate stove (per illustration), and "Mayflower" open front heater (per illustration), declared to be dutiable under Tariff Item 451. These are stoves on legs and stand out from the wall, not being built into the wall as in the case of fire-places and the like.

Rolled band steel, per sample, for use on gang machines for cutting stone or marble, declared to be dutiable under Tariff Item 378.

Viscose bottle tops (sample), declared to be dutiable under Tariff Item 711.

Jippi Jappa hats, made from Torquilla Paja Palm (per sample), unfinished, unblocked, and unbleached, declared to be free, under Tariff Item 639. The hats on which the Department ruled were furnished to the Association for examination of the members interested.

Advertising wrappers (per sample), for Wrigley's Chewing Gum, declared to be dutiable under Tariff Item 178.

Swansdown trimming, declared dutiable under Tariff Item 711.

Concord leather link belting, composed of small pieces of leather held together with iron rivets, per sample, declared dutiable under Tariff Item 609.

Pressed felt buffing wheels, per sample, declared dutiable under Tariff Item 567.

"Wincarnis" wine, manufactured by Messrs. Coleman and Company, Norwich, England, declared dutiable under Tariff Item 220 at 60 per cent.

Composition foil, being lead foil, coated with tin (per sample), declared to be free of duty under Tariff Item 343.

"Mineral Black," "Vine Black," dry (being bone black and clay), and screened soot, declared to be dutiable under Tariff Item 711.

Magnesia pipe covering, per sample, declared to be dutiable under Tariff Item 711.

Classification of Articles Under Tariff Item 696.

Declared, that the following articles are free of duty when imported under the conditions in Tariff Item 696, viz.:—

"Lantern Slides" and "Photographic Films"—as photographic reproductions; also, adding machines, not being cash registers;

Further, that magic lanterns, stereopticons, cameragraphs and moving picture machines are not exempt from duty as philosophical and scientific apparatus under Tariff Item 696.

Greeley Hypodermic Units (sample), being entirety of drug and needle in container of metal and glass—metal of chief value—declared dutiable at 30 per cent. General Tariff and 20 per cent. Preferential Tariff.

NOTE.—Appraisers' Bulletin No. 630 should be altered to conform with above decision.

Ivory Soap, made by Proctor & Gamble, Cincinnati; on re-appeal the former decision of the Board was sustained that this soap is dutiable at 32½ per cent.

Elliott Addressing Machine, declared to be dutiable under Tariff Item 442, in effect from 1st July, 1914.

Sulphonated Oil (so-called), per sample from Martin Dennis Co., Newark, N.J., ruled to be dutiable under Tariff Item 711.

Litho Off-set Rotary Printing Press No. 1, manufactured by Linotype & Machinery, Ltd., Broadheath, England, declared dutiable under Item 442.

Gas Producing Appliances, when converting apparatus for metallurgical processes in metals, ruled under Tariff Item 460.

Fire Brick.

Declaration of Board of Customs, Ottawa, 10th November, 1914, re Item 281, Customs Tariff, 1907:

That the following fire brick shall be rated as of a class or kind not made in Canada, and admitted free of duty, viz.:—

(1) Rectangular fire brick. Ordinary 9 in. by 4½ in. by 2½ in., valued at over \$16 per thousand at place of export, the estimated weight of each such brick being 6 lbs. 13 oz.

(2) Other rectangular bricks of fire clay not over 9 in. long, nor over 4½ in. wide, nor over 2½ in. thick, values at more than 23½c. per 100 lbs. at place of export.

These rectangular bricks include shapes known as "Splits," 9 in. by 4½ in. by 2 in., and "Soaps," 9 in. by 2½ in. by 2¼ in.

(3) "Key" brick for arches of smelting or reduction furnaces.

(4) "Neck" bricks for smelting or reduction furnaces.

(5) Edge bricks for smelting or reduction furnaces.

(6) Magnesite fire brick.

(7) Silica fire brick when composed of not less than 90 per cent. silica.

That the following fire brick shall be rated as subject to duty under Item 282 of the Customs Tariff, 1907, viz.:—

(a) Rectangular fire brick when valued at not more than \$16 per thousand for the ordinary size, 9 in. by 4½ in. by 2½ in.

(b) Other rectangular fire brick valued at not more than 23½c. per 100 lbs.

(c) All flat bricks of fire clay 6 in. by 6 in. by ½ in. and up to 48 in. by 30 in. by 9 in.

(d) All "cupola blocks" of fire brick, large or small.

(e) All circle bricks made from fire clay.

(f) All fire brick, stove linings and annealed furnace linings.

(g) All locomotive fire brick blocks, rotary kiln blocks and combustion chamber blocks for engines.

(h) Hollow blocks, hollow shapes, gas retorts, crucible rests, spouts, and runner brick composed of fire brick.

In effect November 20, 1914.

"Silkene Gum," per sample, consisting of over 80 per cent. starch and remainder dextrine, declared dutiable under Tariff Item 39.

Hand piece for use in connection with dental engines, declared to be entitled to entry under Item 466.

Diamonds, mined in British South Africa, and cut and polished in Amsterdam, when imported from the United Kingdom, declared to be subject to duty under the General Tariff.

Bottles, containing champagne and wine, imported under the French Treaty, declared to be subject to war tax.

Velvets of pure silk pile with cotton back, when imported from France, declared not to be entitled to entry under Schedule C, French Treaty.

Tweezers, per sample, specially designed and constructed for use of dentist, declared entitled to entry under Tariff Item 466.

Departmental Rulings.

Schiffchenstick machines, as illustrated and described, used for embroidery or knitting an ornamental design on plain bobinet fabric in the web, ruled under Item 468 at 10 per cent. ad valorem, General Tariff.

Cigar bands and labels (paper), question of prohibition under Item 1209, Schedule C.—ruled that said bands and labels may be imported for the present without indication thereon of the country of origin.

Special conduit paper, per sample, rolled in narrow strips, ruled to be dutiable at 25 per cent. ad valorem, General Tariff, Item 197.

Compound, so-called, per sample, for use in the manufacture of conduit, ruled free under Item 584 as being "asphaltum solid."

Band steel, bevelled or not, No. 14 gauge and thinner, ruled to be dutiable under Item 384. By the provisions of this item the material is free under the British Preferential Tariff and dutiable at 5 per cent. ad valorem under the General Tariff, exclusive of the Customs war tariff.

"Koffio" (uncooked cereal, so-called), from Sleepy Eye Pure Food Co., Minneapolis, ruled to be dutiable under Item 26 as coffee substitute, 2c. per lb.

"Kayao," a vegetable stearine, ruled to be dutiable under Item 711 at 15 per cent. British Preferential Tariff and 17½ per cent. ad valorem, General Tariff.

Cocoaline, a vegetable stearine, ruled to be dutiable under Item 711.

NOTE.—Ordered to amend Bulletin 630, page 26, "Raffia fibre," by adding the word "natural."

Dutiable pictures imported in frames, ruled that the frame is to be appraised separately at its fair market value, in each case, and rated for duty under Item 512. British Preferential rate 20 per cent., and General Tariff rate 30 per cent. ad valorem.

Clover bunchers for use on mowers, dutiable under Tariff Item 448. By the provisions of this item the duty payable under the British Preferential Tariff is 15 per cent., and under the General Tariff 25 per cent. ad valorem.

Adjustable Grain Lifter Guards (malleable iron), for use on mowers and binders, dutiable under Tariff Item 448. Rates of duty same as above.

Nulomoline (per sample), dutiable under Tariff Item 139 as grape sugar or syrup. Under this item the duty payable under the British Preferential Tariff is 40c., and under the General Tariff 62½c. per 100 lbs. This rating supersedes prior rulings on this article.

Golf Bags of cotton and leather and Dunnage or Cabin Bags of cotton with nickel handle, dutiable under Tariff Items 424 and 682. By the provisions of these items the duty payable under the British Preferential Tariff is 20 per cent. and under the General Tariff 30 per cent. ad valorem.

Pine Needle Oil without admixture (per sample), dutiable under Tariff Item 261. Under Tariff Item 261 free entry is allowed (exclusive of Customs War Tariff).

Woven Asbestos Cloth (fabric in the web), even although strengthened with wire woven therein, may be entered for duty under Tariff Item 312, so long as the asbestos is the component material of chief value, and provided such fabric in the condition imported is not a prepared packing, belting, brake band lining, or the like. By the provisions of Tariff Item 312 the duty payable under the British Preferential Tariff is 15 per cent., and under the General Tariff 25 per cent. ad valorem.

Wire Gauge.—In Appraisers' Bulletin No. 856, Collectors of Customs are instructed on the subject as follows:—

"In view of the provisions contained in Item 404 of the Customs Tariff Amendment of 1914, Bulletin No. 779, of February 23rd, 1914, respecting wire gauge is hereby cancelled.

In regard to wire subject to duty or dumping duty, as there is usually an extra charge made for drawing wire smaller than the base size (9), and as such charge varies according to the gauge of the wire, the following rules may be observed in estimating the charge for "extras" entering into the value of the wire, viz.:—

For the purpose of computing extras on wire of irregular gauge number, the size of the wire may be reckoned as represented by the next smaller gauge (higher number), as numbered on the Imperial Wire Gauge.

Under Tariff Item 404, Steel Wire of Nos. 9, 12 or 13 Gauges must not vary more than four one-thousandths of an inch from such gauges in order to be admitted free, otherwise such wire is dutiable.

The Gauge numbers from 1 to 30 inclusive and the corresponding diameters in decimals of an inch as shown on the Imperial Standard Gauge are as follows:—

No. 1	.300	No. 16	.064
2	.271	17	.056
3	.252	18	.048
4	.232	19	.040
5	.213	20	.036
6	.192	21	.032
7	.176	22	.028
8	.160	23	.024
9	.144	24	.022
10	.128	25	.020
11	.116	26	.018
12	.104	27	.016
13	.092	28	.014
14	.180	29	.013
15	.070	30	.012

Chain, stud link or otherwise, is only admitted under Item 470 as being cable chain, when the iron of which the links are made is $\frac{3}{4}$ in. or over in diameter. Cable chain for vessels is not restricted as to use to anchoring or mooring.

Christmas stockings containing any article or articles which are the manufacture or produce of any country not entitled to preferential treatment, shall not be allowed entry in Canada under the Preferential Tariff. In effect from September 17, 1914.

Communion Glasses—Customs File No. 82242—Imported separately, not in cabinets, free, Item 691.

Correction—Appraisers' Bulletin 630, page 14, "Feldspar, crushed, Item 711," should read "Item 296."

Appraisers' Bulletin 630, page 14, "Foil, metal, composition foil, Item 343," add the words "found to be genuine tin foil."

Coated cloth per sample, sewn together to be used as a binding for hat sweats, ruled to be free under Item 638 (a), when for the manufacture of hats.

Heavy rolled shapes imported to be fabricated in Canada and used in the construction of one of the International Bridges—regulations prescribed under which free entry for fabricating could be allowed.

Tooth paste tubes held to be prohibited because of not conforming to the requirements of Item 1209, Schedule "C" of the tariff as to showing country of origin, released as a special case.

Aniline dyes blended in the United States from dyes imported from Switzerland and Germany, ruled to be entitled to entry as being of American manufacture.

Cyanide of Sodium to be used for reducing metals, ruled free, the same as cyanide of potassium.

Cotton Hat Linings for straw hats, ruled to be not entitled to free entry under Item 638 as hatters' tips and sides; but held to be subject to drawback of 99 per cent. for home consumption under Tariff Item 1012.

Advertising Circulars, per sample, entered at 35 per cent. ad valorem, should be dutiable at 15c. per lb.

Wafer Shells, made of rice flour paste, used to enclose medicinal powders of disagreeable taste, ruled dutiable at 17 $\frac{1}{2}$ per cent. ad valorem under Tariff Item 711.

Steam and Gasoline Net Lifting Machines for equipment of fishing vessels are now made in Canada. They are, therefore, not entitled to entry under Item 470.

Marrow Stitching Machine—30 per cent., General Tariff Item 440.

Malleable links for link belting, per samples, 30 per cent. ad valorem.

The Famous Rotary, Folding and Gluing Paper Box Machine manufactured by the International Box Machine Co., Nassau, N.H., 10 per cent., Item 442.

Palmolive advertising leaflet, rate changed from 35 per cent. to 15c. per lb.

Rolled Hexagon Bars of Iron or Steel on which duty was paid before April 7th are subject to drawback so long as same are not drawn until April 7th.

The following articles may be admitted free of duty under Tariff Item 470, when imported for use in the construction of ships or vessels, viz.:—

Corrugated Boiler Furnaces;

Boiler Tubes;

"Metallic Packing" (so known and designated).

Howden's Down Draft System (forced), including patent doors and other parts thereof;

Ships' Anchors;

Cable Chain made from iron or steel bars not less than $\frac{3}{4}$ of an inch in diameter;

Downton Deck Pump (patent);

Capstans;

Windlasses;

Steering gear;

Ships' Deck Winches, of throttle handle design, having cylinders 5 in. by 5 in. and upwards, not controlled by clutch or brake band (until further instructed regarding such winches).

NOTE.—Tubing of steel (not being boiler tubes), ten inches in diameter and less is made in Canada and should not be admitted free under Item 470. Tubing of iron ten inches in diameter or less is also dutiable, as "iron" and "steel" are regarded as synonymous terms for Customs Tariff purposes.

Importation of Matches made with white phosphorus prohibited under authority of Section 4 of the White Phosphorus Matches Act, assented to 27th of May, 1914, per instructions issued by the Department of Customs to Collectors on September 7, 1914.

Personal gifts from Canadian Overseas Forces to relatives or friends may be entered free during the war under Tariff Item 690.

Donations of Articles for the personal use of German prisoners of war interned in Canada and not for sale, may be entered free during the war under Tariff Item 690.

Milk Bottles: The Department of Customs, on the 19th of January, 1915, instructed collectors relative to milk bottles as follows:—

"Large quantities of milk bottles of wine measure capacity having been imported into Canada for use in the sale of milk on the basis of imperial measure, the Department of Inland Revenue have requested that Customs Officers be required to notify the nearest Inspector of Weights and Measures of every shipment of milk bottles imported into Canada, holding the goods until the Inspector has an opportunity of selecting and testing sufficient samples to satisfy himself that the whole shipment is within the tolerated percentage of error.

"You are instructed to notify the Inspector of Weights and Measures accordingly when such shipments are brought in at your port."

Electric Welded Tubing of Steel, per sample, manufactured by the Standard Welding Co., Cleveland, dutiable under Tariff Item 396, when costing over 3 $\frac{1}{2}$ c. per lb.

Tubular Seamless Bags, about six feet long, open at each end and manufactured of twine, per sample, for use in sugar refineries, dutiable under Tariff Item 549, from 1st January, 1915.

Foil, interlined with paper or paper backed, dutiable under Item 711.

Special or Dumping Duty.

"Dumping Duty," ruled May 20, 1914, that:—

Motorcycles are held to be of a class or kind of goods made in Canada, and therefore subject to the provisions of the tariff respecting special or dumping duty.

Special or Dumping Duty—By Appraisers' Bulletin 869, dated June 17th, 1915, Collectors of Customs are instructed that special or dumping duty is to be collected in all cases where the selling price for cash to the purchaser in Canada is more than $7\frac{1}{2}$ per cent. lower than the value of the goods for duty purposes. Thus in cases where the purchaser in Canada is granted a $7\frac{1}{2}$ per cent. export allowance, if the cash discount exceeds $2\frac{1}{2}$ per cent., special or dumping duty is leviable.

Further New Regulations under the Customs Dumping Clause, dated Ottawa, August 24, 1914:—

The Regulations heretofore made as to exemptions from Customs Special Duty (or dumping duty), under paragraph 7 of section 6 of the Customs Tariff, 1907, as set forth in Memo. 1407 B, Memo. 1506 B, and Memo. 1652 B, are repealed and the following Regulations are made and established in place thereof—in effect 1st September, 1914—viz.:—

Under the Special duty provisions of the Customs Tariff, the Special duty (or dumping duty) is not to apply in the following cases, viz.:—

(a) When the difference between the fair market value and the selling price of the goods to the importer in Canada does not exceed five per cent. of their fair market value.

Provided that the whole difference shall be taken into account for Special duty purposes when exceeding 5 per cent.

Provided further, that Special duty or dumping duty under the Customs Tariff shall without exemption allowance apply to articles of a class or kind made in Canada when admitted free of ordinary duty and shall also without exemption allowance apply to round rolled wire rods of iron or steel.

Special or Dumping Duty—Under the foregoing changed regulations many Customs officers held that the clause limiting the special duty of 15 per cent. ad valorem was no longer in force; and that the whole difference between the fair market value as sold for home consumption and the selling price to the purchaser in Canada should be collected as special duty even when exceeding 15 per cent. ad valorem. This practice, however, has been ascertained not to be correct; and the Department of Customs has ordered that special duty shall not in any case exceed 15 per cent. ad valorem.

Metal crete—Consisting of finely pulverised iron filings, designed for hardening concrete floors and the like, declared to be subject to special or dumping duty.

Roquefort or Swiss Cheese subject to special or dumping duty.

Ribbon Gold Leaf declared to be exempt from special or dumping duty as being of a class or kind of goods not made in Canada.

The Emergency Revenue measure of the 12th ult. levies a Customs duty of 5 per cent. British Preferential and $7\frac{1}{2}$ per cent. General Tariff on most products which formerly were free of duty. Whilst such products were free of Customs duties special or dumping duty applied without any marginal exemption allowance so long as they were of a class or kind produced in Canada. But now that such products are subject to Customs duties special or dumping duty only applies under the regulations in cases where the selling price is more than 5 per cent. lower than the value for duty.

Departmental Instruction issued by the Commissioner of Customs re Gold and Silver Articles Prohibited from Importation under Tariff Item 1209 for Marking or for Bearing False Trade Description.—Ottawa, Nov. 16, 1914.

Gold and silver articles imported in contravention of Tariff Item 1209 should be seized and the seizure reported on form K-9.

Tariff Item 1209 prohibits (a) the importation of goods which if sold would be forfeited under the provisions of Part VII of the Criminal Code.

Under these provisions articles of gold or silver bearing a false trade description are liable to seizure.

The following are specimens of false trade descriptions:—

(1) Watch cases, marked "Solid gold," "Gold filled" or "Coil silver"—when made of base metals and only plated.

(2) Watch movements, marked "Railroad Special," "21 Jewel," when not containing any jewel, or containing a less number of jewels than as stated.

Silver plated ware made in the United States and marked "Sheffield" with crown and anchor is also subject to seizure under subsection (b) of Tariff Item 1209, unless accompanied by a definite indication of the foreign state or country in which the goods were made or produced.

The following is an extract from Schedule C of the Customs Tariff, 1907, viz.:—

Prohibited Goods.

1209. Any goods—(a) which, if sold, would be forfeited under the provisions of Part VII of the Criminal Code; or,

(b) Manufactured in any foreign state or country which bear any name or trade mark which is or purports to be the name or trade mark of any manufacturer, dealer or trader in the United Kingdom, or in Canada, or in any other British country, unless such name or trade mark is accompanied by a definite indication of the foreign state or country in which the goods were made or produced;

Provided that for the purpose of this item if there is on any goods a name which is identical with or a colorable imitation of the name of a place in the United Kingdom, or in Canada, or in any other British country, such name, unless it is accompanied by the name of the state or country in which it is situate, shall, unless the Minister decides that the attaching of such name is not calculated to deceive (of which matter the Minister shall be the sole judge), be treated as if it was the name of a place in the United Kingdom, or in Canada, or in any other British country.

Drawback on Imported Pig Iron Used in the Manufacture of Goods for Export and other Goods.—Ottawa, August 28th, 1914.

An Order in Council was passed on the 15th August, 1914, establishing the following regulations respecting drawback on imported pig iron, when used with pig iron made in Canada, in the manufacture of goods for export and other goods:—

Regulations

1. The drawback of Customs duty allowed under the Customs Act Amendment of 1914, not exceeding 99 per cent. of the duty paid, may be paid through the Department of Customs on imported pig iron which, when mixed with pig iron made in Canada, has entered into the manufacture of goods exported and other goods; provided, however, that such drawback shall not be computed on a greater quantity of pig iron than entering into the exported goods; provided also that such drawback shall not be paid unless such pig iron has been used for the purpose herein specified after the 11th day of June, 1914, nor unless the duty has been paid on the pig iron within three years of the date of the presentation of the claim for drawback.

2. The aforesaid drawback may be paid to the manufacturer or producer of the goods in which the pig iron subject to drawback is used under the following conditions, viz.:—

(a) The quantity of such materials used and the amount of duties paid thereon shall be ascertained.

(b) Evidence satisfactory to the Minister of Customs in respect of the manufacture or production of the articles in which the said materials are claimed to have been used, shall

be furnished, together with particulars of the goods exported and the quantity of pig iron entering into the manufacture thereof.

(c) The claim for drawback shall be verified under oath, before a Collector of Customs or Justice of the Peace, in such form as the Minister of Customs shall prescribe.

(d) The Minister of Customs may also require in any case the production of such further evidence, in addition to the usual averments, as he deems necessary to establish the *bona fides* of the claim.

NOTE.—The form of Claimant's Oath K. 15½, as set forth in Memo. 1395 B is approved by the Minister of Customs, in respect of claims for drawback of Customs duty on imported pig iron which, when mixed with pig iron made in Canada, has entered into the manufacture of goods exported and other goods; provided that the schedule of claim (K. 15¼) shall be in the form of schedule K. 15, with appropriate changes, and so as to correctly show in separate columns the quantity of pig iron used in the exported articles and also in articles not exported, manufactured by the claimant.

Drawback on Imported Pig Iron when used in Canada in the Manufacture of Mowing Machines and Other Implements for Home Consumption.

Ottawa, 20th August, 1914.

The following regulations have been made and established by Order in Council of the 15th August, 1914, respecting drawback of Customs duty on imported pig iron when used with pig iron made in Canada, in the manufacture of mowing machines, reapers, harvesters, binders and attachments for binders for home consumption in Canada.

1. The drawback of Customs duty allowed under the Customs Tariff Act, 1914, not exceeding 99 per cent. of the duty paid, may be paid through the Department of Customs, on imported pig iron used by the manufacturer of mowing machines, reapers, harvesters, binders or attachments for binders in the manufacture of the said goods and other goods

for home consumption in Canada; provided, however, that such drawback shall not be paid unless such pig iron has been used for the purpose herein specified after the 11th day of June, 1914, nor unless the duty has been paid on the pig iron within three years of the date of the presentation of the claim for drawback.

2. The aforesaid drawback may be paid to the manufacturer or producer of the said agricultural implements in which the pig iron subject to drawback is used under the following conditions, viz.:—

(a) The quantity of such materials used and the amount of duties paid thereon shall be ascertained.

(b) Evidence satisfactory to the Minister of Customs in respect of the manufacture or production of the articles in which the said materials are claimed to have been used, shall be furnished.

(c) The claim for drawback shall be verified under oath before a Collector of Customs or Justice of the Peace in such form as the Minister of Customs shall prescribe.

(d) The Minister of Customs may also require in any case the production of such further evidence, in addition to the usual averments, as he deems necessary to establish the *bona fides* of the claim.

(e) The drawback in respect of such pig iron shall not be computed on a quantity greater than all the pig iron entering into the manufacture of the mowing machines, reapers, harvesters, binders and attachments for binders manufactured by the claimant during the period covered by the claim for drawback.

NOTE.—The form of Claimant's Oath and Statement of Claim (K. 15½), as set forth in Memo. 1395-B of 22nd March, 1907, are approved by the Minister of Customs, in respect of claims for drawback of Customs duty on imported pig iron used by manufacturers of mowing machines, reapers, harvesters, binders or attachments for binders, in the manufacture of the said goods and other goods for home consumption in Canada.

APPENDIX "B."

Customs Tariff Changes of August 22nd, 1914.

Tariff Items.	NEW TARIFF RATES.			FORMER TARIFF RATES.		
	British Preferential Tariff.	Intermediate Tariff.	General Tariff.	British Preferential Tariff.	Intermediate Tariff.	General Tariff.
21 Cocoa paste or 'liquor' and chocolate paste or 'liquor,' sweetened, in blocks or cakes not less than two pounds in weight.....per pound.	4 cents.	4½ cents.	4½ cents.	3½ cents.	4 cents.	4 cents.
22 Preparations of cocoa or chocolate in powder form	22½ p.c.	27½ p.c.	27½ p.c.	20 p.c.	25 p.c.	25 p.c.
23 Preparations of cocoa or chocolate, n.o.p. and confectionery coated with or containing chocolate, the weight of the wrappings and cartons to be included in the weight for duty	1 cent 22½ p.c.	1 cent. 35 p.c.	1 cent. 35 p.c.	½ cent. 22½ p.c.	½ cent. 35 p.c.	½ cent. 35 p.c.
25 Chicory, kiln-dried, roasted or ground,	2 cents.	3 cents.	3 cents.	2 cents.	2½ cents.	3 cents.
25a Coffee, extract of, n.o.p., and substitutes therefor of all kinds per pound	5 cents.	6 cents.	6 cents.	2 cents.	2½ cents.	3 cents.
26 Coffee, roasted or ground, and all imitations thereof and substitutes therefor, including acorn nuts, n.o.p.	4 cents.	5 cents.	5 cents.	1½ cents.	1¾ cents.	2 cents.
27 Coffee, roasted or ground, when not imported direct from the country of growth and production...per pound and,	4 cents. 7½ p.c.	5 cents. 10 p.c.	5 cents. 10 p.c.	1½ cents. 10 p.c.	1¾ cents. 10 p.c.	2 cents. 10 p.c.
28 Coffee, green, imported direct from the country of growth and production, and green coffee purchased in bond in the United Kingdom	2¼ cents.	3 cents.	3 cents.	Free.	Free.	Free.
28a Tea imported direct from the country of growth and production, and tea purchased in bond in the United Kingdom	Free.	Free.	Free.	Free.	Free.	Free.
29 Coffee, green, n.o.p.....per pound. and,	3 cents. 10 p.c.	3 cents. 10 p.c.	3 cents. 10 p.c.	10 p.c.	10 p.c.	10 p.c.
29a Tea, n.o.p.	10 p.c.	10 p.c.	10 p.c.	10 p.c.	10 p.c.	10 p.c.
43 Condensed milk, the weight of the package to be included in the weight for duty, per pound	2½ cents.	3¾ cents.	3¾ cents.	2 cents.	3 cents.	3¾ cents.
44 Condensed coffee with milk	25 p.c.	35 p.c.	35 p.c.	20 p.c.	27½ p.c.	30 p.c.

45	Milk foods, n.o.p.; prepared cereal foods, in packages not exceeding twenty-five pounds weight each	20 p.c.	27½ p.c.	27½ p.c.	17½ p.c.	22½ p.c.	25 p.c.
66	Biscuits, sweetened	20 p.c.	30 p.c.	30 p.c.	17½ p.c.	25 p.c.	27½ p.c.
103	Fruits preserved in brandy, or preserved in other spirits, and containing not more than forty per cent. of proof spirit in the liquid contents thereof	60 p.c.	60 p.c.	60 p.c.	50 p.c.	50 p.c.	50 p.c.
104	Fruits preserved in brandy, or preserved in other spirits, and containing more than forty per cent. of proof spirit in the liquid contents thereof per gallon and	\$3.00 30 p.c.	\$3.00 30 p.c.	\$3.00 30 p.c.	\$2.40. 30 p.c.	\$2.40 30 p.c.	\$2.40. 30 p.c.
105	Fruits in air-tight cans or other air-tight packages, n.o.p., the weight of the cans or other packages to be included in the weight for duty per pound	1¾ cents.	2½ cents.	2½ cents.	1½ cents.	2 cents.	2¼ cents.
106	Jellies, jams, preserves and condensed mince meats per pound	2¾ cents.	3¾ cents.	3¾ cents.	2¼ cents.	3 cents.	3¼ cents.
107	Preserved ginger	25 p.c.	35 p.c.	35 p.c.	20 p.c.	27½ p.c.	30 p.c.
113	Cocoanut, desiccated, sweetened or not. per pound	3½ cents.	4½ cents.	4½ cents.	3 cents.	4 cents.	4 cents.
134	All sugar above number sixteen Dutch standard in colour, and all refined sugars of whatever kinds, grades or standards, testing not more than eighty-three degrees by the polariscope, per one hundred pounds And for each additional degree over eighty-eight degrees per one hundred pounds	\$1.52 1 cent.	\$1.93 1½ cents.	\$1.93. 1 1-3 cents.	72 cents. 1 cent.	93 cents. 1 1-3 cents.	93 cents. 1 1-3 cents.
	Provided that fractions of five-tenths of a degree or less shall not be subject to duty, and that fractions of more than five-tenths shall be dutiable as a degree.						
	Provided that refined sugar shall be entitled to entry under the British Preferential Tariff upon evidence satisfactory to the Minister of Customs that such refined sugar has been manufactured wholly from raw sugar produced in the British colonies and possessions, and not otherwise.						
135	Sugar, n.o.p., not above number sixteen Dutch standard in colour, sugar drainings or pumpings drained in transit, melado or concentrated melado, tank bottoms, sugar concrete and molasses testing over fifty-six degrees and not more than seventy-five degrees by the polariscope per one hundred pounds And for each additional degree over seventy-five degrees per one hundred pounds.	88 cents. ¾ cent.	\$1.11¼. 1¼ cents.	\$1.14¼. 1¼ cents.	25 cents. ¾ cent.	31¼ cents. 1¼ cents.	31¼ cents. 1¼ cents.
	Provided that fractions of five-tenths of a degree or less shall not be subject to duty, and that fractions of more than five-tenths shall be dutiable as a degree. Provided that all raw sugar, including sugar specified in this item, the produce of any British colony or possession shall be entitled to entry under the British Preferential Tariff, when imported direct into Canada from any British country.						
	Provided that sugar imported under this item shall not be subject to special duty.						
135a	Raw sugar as described in tariff item 135, when imported to be refined in Canada by Canadian sugar refiners, to the extent of the quantity of sugar refined during the calendar years 1912 and 1913, by such refiners from sugar produced in Canada from Canadian beet-root under regulations by the Minister of Customs, per one hundred pounds, testing not more than seventy-five degrees by the polariscope And per one hundred pounds for each additional degree over seventy-five degrees.	88 cents. ¾ cent.	88 cents. ¾ cent.	88 cents. ¾ cent.	25 cents. ¾ cent.	25 cents. ¾ cent.	25 cents. ¾ cent.
	Provided that sugar imported under this item shall not be subject to special duty.						
	This item to expire December 31, 1914.						
141	Sugar candy and confectionery, n.o.p., including sweetened gums, candied peel, candied pop-corn, candied fruits, candied nuts, flavouring powders, custard powders, jelly powders, sweetmeats, sweetened breads, cakes, pies, puddings and all other confections containing sugar, the weight of the wrappings and cartons to be included in the weight for duty per pound and	½ cent. 22½ p.c.	½ cent. 35 p.c.	½ cent. 35 p.c.	22½ p.c.	35 p.c.	35 p.c.
143	Cigars and cigarettes, the weight of cigars to include bands and ribbons, and the weight of cigarettes to include the paper covering per pound and	\$3.50 25 p.c.	\$3.50 25 p.c.	\$3.50. 25 p.c.	\$3.00. 25 p.c.	\$3.00. 25 p.c.	\$3.00 25 p.c.

144	Cut tobaccoper pound	65 cents.	65 cents.	65 cents.	55 cents.	55 cents.	55 cents.
145	Manufactured tobacco, n.o.p., and snuff, per pound	60 cents.	60 cents.	60 cents.	50 cents.	50 cents.	50 cents.
146	Ale, beer, porter, and stout, when imported in casks or otherwise than in bottle, per gallon	30 cents.	30 cents.	30 cents.	16 cents.	16 cents.	16 cents.
147	Ale, beer, porter and stout, when imported in bottlesper gallon Provided that six quart bottles or twelve pint bottles shall be held to contain one gallon.	42 cents.	42 cents.	42 cents.	24 cents.	24 cents.	24 cents.
150	Lime juice and fruit juices, fortified with or containing not more than twenty-five per cent. of proof spirits per gallon	75 cents.	75 cents.	75 cents.	60 cents.	60 cents.	60 cents.
151	Lime juice and fruit juice, fortified with or containing more than twenty-five per cent. of proof spirits per gallon and	\$3.00 30 p.c.	\$3.00 30 p.c.	\$3.00. 30 p.c.	\$2.40 30 p.c.	\$2.40 30 p.c.	\$2.40. 30 p.c.
152	Lime juice, fruit syrups, and fruit juices, n.o.p.	17½ p.c.	22½ p.c.	22½ p.c.	15 p.c.	20 p.c.	20 p.c.
156	Ethyl alcohol, or the substance commonly known as alcohol, hydrated oxide of ethyl or spirits of wine, n.o.p., gin of all kinds, n.o.p.; rum, whisky and all spirituous or alcoholic liquors, n.o.p.; amyl alcohol or fusel-oil, or any substance known as potato spirit or potato oil; methyl alcohol, wood alcohol, wood naphtha, pyroxylic spirit or any substance known as wood spirit or methylated spirits, absinthe, arrack or palm spirit, brandy, including artificial brandy and imitations of brandy, n.o.p., cordials and liqueurs of all kinds, n.o.p.; mescal, pulque, rum shrub, schiedam and other schnapps; tafia, angostura and similar alcoholic bitters or beverages; and wines, n.o.p., containing more than forty per cent. of proof spirit per gallon of the strength of proof. Provided, as to all the goods specified in this item when of less strength than the strength of proof, that no reduction or allowance shall be made in the measurement thereof for duty purposes, below the strength of fifteen per cent. under proof. Provided also, that when the goods specified in this item are of greater strength than the strength of proof, the measurement thereof and the amount of duty payable thereon shall be increased in proportion for any greater strength than the strength of proof. Provided further, that bottles and flasks and packages of gin, rum, whisky and brandy of all kinds, and imitations thereof, shall be held to contain the following quantities (subject to the provisions for addition or deduction in respect of the degree of strength), viz.:— Bottles, flasks and packages, containing not more than three-fourths of a gallon per dozen, as three-fourths of a gallon per dozen; Bottles, flasks and packages, containing more than three-fourths of a gallon but not more than one gallon per dozen, as one gallon per dozen; Bottles, flasks and packages, containing more than one gallon but not more than one and one-half gallon per dozen, as one and one-half gallon per dozen; Bottles, flasks and packages, containing more than one and one-half gallon but not more than two gallons per dozen, as two gallons per dozen; Bottles, flasks and packages, containing more than two gallons, but not more than two and four-fifths gallons per dozen, as two and four-fifths gallons per dozen; Bottles, flasks and packages, containing more than two and four-fifths gallons but not more than three gallons per dozen, as three gallons per dozen; Bottles, flasks and packages, containing more than three gallons but not more than three and one-fifth gallons per dozen, as three and one-fifth gallons per dozen. Provided further, that bottles or phials of liquors for special purposes, such as samples not for sale to the trade, may be entered for duty according to actual measurement, under regulations prescribed by the Minister of Customs.	\$3.00	\$3.00	\$3.00.	\$2.40	\$2.40.	\$2.40.
159	Spirits and strong waters of any kind, mixed with any ingredient or ingredients, as being or known or						

	designated as anodynes, elixirs, essences, extracts, lotions, tinctures or medicines or ethereal and spirituous fruit essences, n.o.p., per gallon and	\$3.00 30 p.c.	\$3.00 30 p.c.	\$3.00. 30 p.c.	\$2.40 30 p.c.	\$2.40 30 p.c.	\$2.40 30 p.c.
160	Alcoholic perfumes and perfumed spirits, bay rum, cologne and lavender waters, hair, tooth and skin washes, and other toilet preparations containing spirits of any kinds: (a) When in bottles or flasks containing not more than four ounces each (b) When in bottles, flasks, or other packages, containing more than four ounces each per gallon and	60 p.c. \$3.00 40 p.c.	60 p.c. \$3.00 40 p.c.	60 p.c. \$3.00. 40 p.c.	50 p.c. \$2.40. 40 p.c.	50 p.c. \$2.40 40 p.c.	50 p.c. \$2.40. 40 p.c.
161	Nitrous ether, sweet spirits of nitre and aromatic spirits of ammonia per gallon and	30 p.c. \$3.00 30 p.c.	30 p.c. \$3.00 30 p.c.	30 p.c. \$3.00. 30 p.c.	30 p.c. \$2.40 30 p.c.	30 p.c. \$2.40 30 p.c.	30 p.c. \$2.40 30 p.c.
162	Medicinal or medicated wines, including vermouth and ginger wine, containing not more than forty per cent. of proof spirits	60 p.c.	60 p.c.	60 p.c.	50 p.c.	50 p.c.	50 p.c.
168	Malt flour containing less than fifty per cent. in weight of malt; also extract of malt, fluid or not, including grain molasses—all articles in this item upon valuation without British or foreign excise duties under regulations by the Minister of Customs per pound and	3 cents. 35 p.c.	3 cents. 35 p.c.	3 cents. 35 p.c.	35 p.c.	35 p.c.	35 p.c.
220	All medicinal, chemical and pharmaceutical preparations, compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, n.o.p.:— (a) When dry (b) All others Provided that drugs, pill-mass and preparations, not including pills or medicinal plasters, recognized by the British or the United States Pharmacopoeia, or the French Codex as official, shall not be held to be covered by this item; Provided, also, that any article in this item containing more than forty per cent. of proof spirit shall be rated for duty at per gallon and	20 p.c. 60 p.c. \$3.00 30 p.c.	25 p.c. 60 p.c. \$3.00 30 p.c.	25 p.c. 60 p.c. \$3.00. 30 p.c.	20 p.c. 50 p.c. \$2.40 30 p.c.	25 p.c. 50 p.c. \$2.40 30 p.c.	25 p.c. 50 p.c. \$2.40. 30 p.c.
248	Paints and colours, ground in spirits, and all spirits, varnishes and lacquers per gallon	\$1.25	\$1.25	\$1.25.	\$1.00.	\$1.00.	\$1.00.

APPENDIX "C"

Customs War Revenue Act, 1915.

THE REGULATIONS.

The "War Tax" of 5 per cent. ad valorem Preferential or 7½ per cent. ad valorem Intermediate and General provided for in this Act is to be computed for the whole entry, on a separate line at the bottom of the entry, thus:—

	Value.	Rate.	Duty.	Tariff.
War Tax.....	\$..	5 %	\$..	Preferential.
"	\$..	7½%	\$..	General.

Stamp Duties on non-sparkling wines and on champagne and sparkling wines sold in Canada after February 12th, 1915, and on proprietary or patent medicine and on perfumery consumed on and after April 15th, 1915, are to be collected by the Department of Inland Revenue.

The stamps above provided for are to be affixed and cancelled by the importer who is a consumer, while the articles are in the custody of the proper officer of Customs.

Customs Officers, however, may deliver these articles without duty stamps affixed thereto, when the articles are not to be consumed by the importer but held by him for sale.

In such cases the following notation made on the face of the entry shall be signed by the importer or his agent, viz.:—

The articles above described (viz.,) are not for consumption by the importer, but for use otherwise.

Duty stamps are not required to be affixed to non-sparkling wines, champagne, sparkling wines, proprietary or patent medicines and on perfumery when delivered ex-warehouse as ship's stores or for exportation or for war vessels.

The Customs Tariff War Revenue Act, 1915.

Assented to 8th April, 1915.

His Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. This Act may be cited as The Customs Tariff War Revenue Act, 1915.

2. Schedule A of The Customs Tariff, 1907, is amended by striking out tariff item 329 and the enumeration of goods set opposite said item, and by providing that the following items, enumerations and rates of duties, if any, be inserted in said Schedule A:—

TARIFF ITEMS	British Preferential Tariff.	Intermediate Tariff.	General Tariff.
90a. Wild edible berries, n.o.p..	Free.	Free.	Free.
118a. Squid.....	Free.	Free.	Free.
209b. Nicotine sulphate	Free.	Free.	Free.
329. Ores of metals, n.o.p.....	Free.	Free.	Free.
329a. Iron ore	per ton, 6 cents.	8 cents.	8 cents.

3. The Customs Tariff, 1907, is further amended by providing that:—

(1) There shall, in addition to the duties of Customs otherwise established by Schedule A to The Customs Tariff, 1907, and orders in council amending Schedule A, be levied, collected and paid upon all goods enumerated, or referred to as not enumerated, in Schedule A, except as hereinafter provided, when imported into Canada or taken out of warehouse for consumption therein, the several rates of duties of Customs herein specified:

British Preferential Tariff, 5 per cent.; Intermediate Tariff, 7½ per cent.; General Tariff, 7½ per cent.

(2) There shall be levied, collected and paid upon all goods enumerated as being free of duty in Schedule A and in orders in council amending Schedule A, except as hereinafter provided when imported into Canada or taken out of warehouse for consumption therein, the several rates of duties of Customs herein specified:

British Preferential Tariff, 5 per cent.; Intermediate Tariff, 7½ per cent.; General Tariff, 7½ per cent.

Provided, however, that the following goods shall be exempt from the foregoing provisions:

(a) Goods admitted into Canada free of Customs duty under the provisions of Sections 8 and 9 of The Customs Tariff, 1907;

(b) Goods enumerated in Schedule C of The French Convention Act, 1908;

(c) Goods imported to be used in the manufacture of mowing machines, harvesters, self-binding or without binders, binding attachments, reapers, and complete parts thereof, under regulations by the Minister of Customs;

(d) Goods imported to be used in the manufacture of binder twine for harvest binders, under regulations by the Minister of Customs;

(e) Articles imported to be used in the manufacture of goods enumerated in Tariff Item 682 in Schedule A, under regulations by the Minister of Customs;

(f) Anthracite coal and anthracite coal dust;

(g) Bacteriological products or serum for subcutaneous injection;

(h) Vaccine and ivory vaccine points;

(i) Pressed felt, elastic webbing and hollow blocks of wood imported to be used in the manufacture of artificial limbs;

(j) Steel imported to be used in manufacturing rough unfinished parts of rifles, when such parts are to be used in rifles to be made for the Government of Canada;

(k) Fabrics of which silk is the component material of chief value imported to be used in the manufacture of neckties;

(l) Silk in the gum or spun silk imported to be used in the manufacture of woven labels;

(m) Manuscripts;

(n) Bananas;

(o) Acid phosphate of lime, sulphate of ammonia, nitrate of soda, muriate and sulphate of potash, imported to be used for fertilizing purposes;

(p) Cotton seed cake and cotton seed cake meal;

(q) Goods enumerated in the following tariff items in Schedule A: 1, 2, 3, 19, 20, 20a, 21, 22, 23, 25a, 26, 27, 28, 28a, 29, 29a, 39b, 40, 45, 55, 60, 61, 66, 77a, 90a, 101a, 118a, 129, 132, 134, 135, 142, 143, 144, 145, 153, 164, 169, 171, 172, 173, 174, 175, 176, 178a, 180a, 184, 196, 201, 209b, 329, 329a, 348a, 352a, 359, 360, 363, 369, 373, 441, 443, 445, 445a, 446a, 464, 466, 466a, 470, 483, 544, 544a, 576, 595, 596, 662, 663, 676, 682, 688, 689, 689a, 690, 690a, 691, 692, 692a, 693, 694, 695a, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, and 709.

Provided, also, that excise duties shall be disregarded in estimating the market value of goods for the purposes of this amendment of The Customs Tariff, 1907.

Provided, further, that the duties of Customs collected and paid under the provisions of this section shall not be subject to drawback under Schedule B.

4. This Act shall be deemed to have come into force on the twelfth day of February, 1915, and to have applied to all goods mentioned in the preceding sections, imported or taken out of warehouse for consumption on and after that day, and to have also applied to goods previously imported for which no entry for consumption was made before that day.

Explanatory.

List of articles exempt from the Customs War Tax of 5 per cent. ad valorem, preferential, or 7½ per cent. ad valorem, intermediate and general, provided for in the Customs Tariff War Revenue Act, 1915.

Tariff Items.	Articles Exempt from War Tax.
Sec. 8 and 9....	(a) Goods admitted into Canada free of Customs duty under the provisions of sections 8 and 9 of The Customs Tariff, 1907;
Tariff Items.	Articles Exempt from War Tax.
	(b) Goods enumerated in Schedule C of The French Convention Act, 1908, viz.:—(Irrespective of origin and course of importation).
Item 86 ex....	Vegetables, except tomatoes, including baked beans in cans or other air tight packages, n.o.p.
120 ex....	Anchovies, sardines, sprats, and other fish, packed in oil or otherwise, in tin boxes, weighing over eight ounces and not over twelve ounces each.
163 ex....	Wines of the fresh grape of all kinds, not sparkling, imported in barrels or in bottles.
165 ex....	Champagne and all other sparkling wines in bottles.
169 ex....	Novels, etc., unbound or paper bound, or in sheets, in the French language, not including Christmas annuals or juvenile or toy books.
171 ex....	Books, printed, periodicals or pamphlets, in the French language, n.o.p., not including blank account books, copy books, or books to be written or drawn upon.
220 ex....	All medicinal, chemical and pharmaceutical preparations, compounded of more than one substance, including patent and proprietary preparations, tinctures, pills, powders, troches, lozenges, syrups, cordials, bitters, anodynes, tonics, plasters, liniments, salves, ointments, pastes, drops, waters, essences and oils, n.o.p.
Ex (b)	All other than dry, and not containing alcohol.
	Provided that drugs, pill mass and preparations, not including pills or medicinal plasters, recognized by the British or United States Pharmacopœia, or the French Codex as official, shall not be held to be covered by this item.
262	Olive oil, n.o.p.
575 ex....	Embroideries, n.o.p.; lace, n.o.p.; collars or collarettes in lace and all manufactures of lace; nettings of cotton, linen, silk, or other material, n.o.p.
581 ex....	Velvets of pure silk and silk fabrics.
582	Ribbons of all kinds, and materials.
583	Manufactures of silk or of which silk is the component part of chief value, n.o.p.
Various.....	(c) Goods imported to be used in the manufacture of mowing machines, harvesters, self-binding or without binders, binding attachments, reapers, and complete parts thereof, under regulations by the Minister of Customs.
Various.....	(d) Goods imported to be used in the manufacture of binder twine for harvest binders, under regulations by the Minister of Customs.
Various.....	(e) Articles imported to be used in the manufacture of goods enumerated in tariff item 682 in Schedule A, under regulations by the Minister of Customs.
586	(f) Anthracite coal and anthracite coal dust;
206	(g) Bacteriological products or serum for subcutaneous injection;
206	(h) Vaccine and ivory vaccine points.
719	(i) Pressed felt, elastic webbing and hollow blocks of wood imported to be used in the manufacture of artificial limbs.
725	(j) Steel imported to be used in manufacturing rough unfinished parts of rifles, when such parts are to be used in rifles to be made for the Government of Canada.
765	(k) Fabrics of which silk is the component material of chief value imported to be used in the manufacture of neckties.
577	(l) Silk in the gum or spun silk imported to be used in the manufacture of woven labels.
177	(m) Manuscripts.
90	(n) Bananas.
Various.....	(o) Acid phosphate of lime, sulphate of ammonia, nitrate of soda, muriate and sulphate of potash, imported to be used for fertilizing purposes.
68	(p) Cotton seed cake and cotton seed cake meal.
1	(q) Horses, cattle, sheep, goats, asses, swine and dogs, for the improvement of stock.
2	Domestic fowls, pure bred, for the improvement of stock, homing or messenger pigeons, and pheasants and quails.

Tariff Items.	Articles Exempt from War Tax.
3Bees.
19Cocoa shells and nibs.
20Cocoa paste or "liquor" and chocolate paste or "liquor," not sweetened, in blocks or cakes.
20aButter produced from the cocoa bean.
21Cocoa paste or "liquor" and chocolate paste or "liquor," sweetened, in blocks or cakes not less than two pounds in weight.
22Preparations of cocoa or chocolate in powder form.
23Preparations of cocoa or chocolate, n.o.p., and confectionery coated with or containing chocolate.
25aCoffee, extract of, and substitutes.
26Coffee, roasted or ground and imitations, etc.
27Coffee, roasted or ground when not imported direct.
28Coffee, green, imported direct, etc.
28aTea imported direct from the country of growth, etc., and purchased in bond in United Kingdom.
29Coffee, green, n.o.p.
29aTea, n.o.p.
39bArrowroot.
40Salt for the use of the sea or gulf fisheries.
45Milk foods, n.o.p.; prepared cereal foods.
55Indian corn, not for distillation.
60Wheat.
61Wheat flour.
66Biscuits sweetened.
77aCocoa beans, not roasted, crushed or ground.
90aWild edible berries, n.o.p.
101aLimes.
118aSquids
129Oysters, seed and breeding, imported for the purpose of being planted in Canadian waters.
132Live fish and fish eggs, for propagating purposes.
134All sugar above No. 16 Dutch standard in color, and all refined sugars of whatever kinds, grades or standards.
135Sugar, n.o.p., not above No. 16 Dutch standard in color, sugar drainings or pumpings, etc., and molasses testing over 56 degrees by the polariscope.
142Tobacco, unmanufactured, for excise purposes.
143Cigars and Cigarettes.
144Cut tobacco.
145Manufactured tobacco, n.o.p., and snuff.
153Lime juice, raw and concentrated, not refined.
164Wine of all kinds, except sparkling wines, containing not more than 40 per cent. of proof spirit, when the produce of any British colony or territory in the South African Customs Union Convention.
169Novels, etc., unbound or paper bound, or in sheets, not including Christmas annuals, or juvenile or toy books.
171Books, printed, periodicals and pamphlets, or parts thereof, n.o.p., not including blank account books, copy books, or books to be written or drawn upon.
172Books on the application of science to industries of all kinds; books printed in any language other than the English and French languages, etc., and bibles, prayer books, psalm and hymn books, religious tracts and Sunday-school lesson pictures.
173Books, embossed, and grooved cards for the blind; and books for the instruction of the deaf, dumb and blind; maps and charts for schools for the blind.
174Books printed by any government or by any association for the promotion of science or letters, and official annual reports of religious or benevolent associations, etc.
175Text books, etc., which are on the curriculum of any university, etc., in Canada; and books specially imported for the use of incorporated mechanics' institutes, public libraries, etc.
176Books, bound or unbound, printed and manufactured more than twelve years.
178aGoods specified in item 178, imported by mail.
180aPhotographs sent to the press for use only as news pictures.
184Newspapers, magazines and literary papers, unbound; fashion plates imported with magazines or periodical trade journals.
196Printing paper, in sheets and rolls valued at not more than 2½c. per pound.
201Matrix paper, not being tissue paper, adapted for use in printing.
209bNicotine sulphate.
329Ores of metals, n.o.p.
329aIron ore.
348aWorks of art in bronze, cast from models made in Canada and designed by sculptors domiciled therein.
352aBells when imported for use of churches only.
359Gold and silver, in ingots, etc., unmanufactured; gold and silver sweepings; and bullion fringe or gold fringe.
360British and Canadian coin and foreign gold coin.
363Platinum wire, and platinum in bars, strips, sheets or plates.
369Chronometers and compasses for ships.
373Scrap iron and scrap steel, old and fit only to be remanufactured, recovered from vessels wrecked in Canadian waters.
441Typecasting and typesetting machines, etc.
443Newspaper printing presses, etc.
445Mowing machines, harvesters, binding attachments, reapers, etc.
445aMalleable iron castings when imported by manufacturers of mowing machines, harvesters, etc.

Tariff Items.	Articles Exempt from War Tax.
446aTraction ditching machines adapted for tile drainage on farms, etc.
464Tools and machinery, and materials or parts in the rough, unfinished, etc., for the manufacture of rifles for the Government of Canada.
466Surgical and dental instruments of metal, etc.
466aGlassware and other scientific apparatus for laboratory work in public hospitals, etc.
470Goods as specified for the manufacture or equipment of ships or vessels.
483Stenotypes, electrotypes and celluloids of newspaper columns in any language other than French and English, and of books, and bases and matrices, and copper shells for the same.
544Binder twine and twine for harvest binders.
544aArticles which enter into the cost of the manufacture of binder twine or twine for harvest binders.
576Silk, raw or as reeled from the cocoon, not being doubled, twisted or advanced in manufacture in any way; silk cocoons and silk waste.
595Locomotives and railway passenger, baggage and freight cars, property of railway companies in U. S. crossing the frontier, etc.
596Materials to be used in Canada for construction of bridges and tunnels crossing the boundary between the United States and Canada, etc.
662Fertilizers, unmanufactured, animal or vegetable manures, etc, etc.
663Fertilizers, compounded, or manufactured, n.o.p.
676Metallic tubes, etc., for manufacture of vaccine points.
682Fish hooks for deep sea or lake fishing, and all other articles enumerated in this item.
688Artificial limbs and parts thereof; artificial teeth not mounted.
689Life boats and life saving apparatus specially imported by societies to encourage the saving of human life.
689aMiners' rescue appliances, and automatic resuscitation apparatus.
690Clothing and books, donations of, for charitable purposes, and photographs, not exceeding three sent by friends and not for sale.
690aCasual donations from abroad sent by friends, and not being advertising matter, tobacco, articles containing spirits or merchandise for sale—when duty does not exceed fifty cents in any one case.
691Communion sets of metal, glass or wood.
692Coins, cabinets of; collections of medals and collections of postage stamps; medals of gold, silver or copper and other metallic articles bestowed as trophies or received as prizes, etc.
692aArticles presented from abroad in recognition of saving human life.
693Collections of antiquities, for public museums, public libraries, etc.
694Models of inventions and of other improvements in the arts.
695 (a)Paintings in oil or water colour and pastels, valued at not less than twenty dollars each; paintings and sculptures by artists domiciled in Canada, but residing temporarily abroad for purposes of study.
696Philosophic and scientific apparatus, utensils, instruments, and preparations, including boxes and bottles containing the same; maps, photographic reproductions, casts as models, etchings, and lithographic prints or charts—when imported under conditions of tariff item 696.
697Globes, geographical, topographical and astronomical.
698Typewriters, type, tablets with moveable figures, and musical instruments, for schools for the blind.
699Botanical and entomological specimens and all other articles in this item.
700Animals and articles brought into Canada for exhibition or competition for prizes.
701Menageries, horses, cattle, carriages, and harness of.
702Carriages for travellers and carriages laden with merchandise.
703Travellers' baggage.
704Apparel, wearing and other personal and household effects, not merchandise, of British subjects dying abroad, but domiciled in Canada; books, pictures, family plate or furniture, personal effects and heirlooms left by bequest.
705Settlers effects as per item 705.
706Articles for the personal or official use of Consuls General, etc.
707Articles for the use of the Governor-General.
708Arms, etc., property of the Imperial Government as per item 708.
709Articles growth, produce or manufacture of Canada, returned—under conditions in item 709.

Appendix "D."

TORONTO, 23rd July, 1914.

F. C. T. O'HARA, ESQ.,

Deputy Minister of Trade and Commerce,

Ottawa, Ont.

DEAR SIR,—Referring to your favor of May 29th, 1914, under file 14806, relative to the question of consolidating the

monthly reports of the Departments of Trade and Commerce, and Customs, respectively.

The Association's Tariff Committee has considered these two reports for February, 1914, and, in the absence of our General Secretary, I am instructed to send you their conclusions as follows:—

Tariff Committee Findings.

Both reports are made up of statistical records which the business community could not well do without.

The Customs monthly statistical returns are made up almost wholly of but two statements, viz., 1st. A statement showing the quantity and value of each line of imported goods entered for consumption in Canada during the month, and also the totals for the months of the fiscal year ending with the date of issue of the report, including the names of the countries where the goods were imported. This statement is in considerable detail, occupying 390 pages of the monthly report, and subdividing imports under 1,630 separate headings or classifications.

2nd. A statement showing the quantity and value of each line of domestic and foreign articles exported, including the country to which exported. This statement occupies 76 pages of the report and subdivides the goods exported under 494 separate headings or classification.

The foregoing statements in the *Customs Monthly* are thoroughly indexed.

The *Trade and Commerce Monthly* statistical report contains like statements (not indexed, however), but bulks trade under more general headings or classifications. Thus, imported articles represented by 1,630 headings in the Customs report are grouped under 644 headings in the Trade and Commerce report; while the exports, represented by 494 headings in the Customs report, are grouped under 234 headings in the Trade and Commerce report. The classification under the more general headings in the Trade and Commerce report, while convenient and useful in some cases, does not present the detailed information which is constantly required in business.

There is a feature, however, about these corresponding statements in the *Trade and Commerce Monthly* which, if included with or added to such a detailed statement of the imports as appears in the *Customs Monthly*, would be of great assistance to the manufacturer, and that is the comparison of imports by years under each heading or classification. This yearly comparison is very desirable, saving time and promoting efficiency.

The same considerations would apply to the statement of exports in the *Customs Monthly* as compared with the statement of exports in the *Trade and Commerce Monthly*.

The statistical comparison by years, however, as now tabulated in the *Trade and Commerce Monthly*, it is submitted, should not be substituted for the comparison in the *Customs Monthly* of imports entered under the British Preferential Tariff, the Treaty Rates Tariff, and the General Tariff, as the importance of the latter cannot be too strongly emphasized.

It is most necessary that the statistics of imports should be subdivided still further than now appears in the Customs returns instead of being aggregated as in the Trade and Commerce returns. Manufacturers should know how their market is being affected by competition from abroad in the lines of goods which they produce, and they can only get these figures in detail from the Customs report. Thus only can they learn to what extent they are conquering the domestic market, and also what share they are taking in the export trade. These trade figures, we know personally, are a stimulant to numerous manufacturers. The desirability of

complete subdivision of these statistics so as to show our foreign trade in each product is appreciated by all business men. This is exemplified by very frequent enquiries at this Tariff Department. For example, a few days ago a United States capitalist visited Midland for the purpose of investigating a proposal which had been made to him by that town to establish a malleable iron works there. After satisfying himself as to the accommodations and suitability of Midland for such a plant, he came to Toronto to investigate the value of importations of malleable castings so as to estimate the market for his factory output, because his decision would depend on his ability to displace malleable castings which are now being imported. Unfortunately, however, we could get no satisfaction from the Canadian trade statistics because there is no separate heading in the trade returns for malleable castings, such castings being grouped with ordinary iron or steel castings for statistical purposes. It appears that, down to 1907, they were separated in the trade reports because the tariff on malleable castings differed from the tariff on ordinary iron or steel castings; but in the 1907 tariff all iron and steel castings were grouped at one rate of duty, and concurrently the statistical grouping was made the same.

The other statements in the report of the Department of Trade and Commerce represent comprehensive groupings and summaries of our trade in each line of goods with foreign countries. There are likewise short summaries in the *Customs Monthly* of our foreign trade, including a statement showing the value of the trade through the principal Custom houses. None of these statements represent duplication; and both sets thereof, in the *Trade and Commerce Monthly*, and in the *Customs Monthly*, fill a want which we feel should be supplied. They are very useful to manufacturers and merchants who must be largely guided by these statements in forming their judgment of markets; and, from the manufacturers' standpoint at any rate, the most important statements in these monthly reports are those referred to in the fourth to tenth paragraphs, inclusive.

The two monthly reports can certainly be consolidated in one volume with good results in a business way, from the public standpoint, through preventing confusion which now occurs sometimes where business men are not familiar with the facts that such reports are issued by two Departments. There are other obvious benefits of increased efficiency, etc.

So far as the Manufacturers Association is concerned, it has no suggestion to make as to which department should issue this monthly report in the event of their consolidation except to express the view that the department which gathers these statistics should, in the interests of efficiency, be made responsible for printing same.

The Association is deeply interested, however, in any system that will hasten the issue of these statistics. On this date, July 22, 1914, the *Customs Monthly* for March is the latest issue to hand. Moreover, it appears to be the rule that the monthly report issued by the Customs is published about a month earlier than the monthly statistical report of the Department of Trade and Commerce. The Association would deprecate any system that would not facilitate the prompt publication of these statistics.

The following recommendations are respectfully submitted:—

1. That a consolidation of these reports should not result in any of the statements now appearing in either report being dropped, except the two statements in the *Trade and Commerce Monthly* headed, respectively:—

- (a) Unrevised statement showing by principal countries the value of imported goods entered for consumption into Canada (both dutiable and free) during the month of Feb-

ruary, 1913 and 1914, and the eleven months ending February 1912, 1913 and 1914.

(b) Unrevised statement showing by principal countries the values of goods exported from Canada (both Canadian and foreign produce) during the months of February, 1913 and 1914, and the eleven months ending February, 1912, 1913 and 1914.

2. That in such a consolidation, the statements in the *Customs Monthly*, corresponding to the foregoing, should not be abridged by dropping the statistics of imports under the various tariffs, or in any other respect, but rather they should

be extended so as to include the present statistical comparison by years as now tabulated in the *Trade and Commerce Monthly*.

G. M. MURRAY,
Secretary.

H. H. CHAMP,
Chairman.

J. R. K. BRISTOL,
Manager Tariff Department.

On motion of Mr. H. H. Champ, seconded by Mr. George Douglas, the report of the Tariff Committee was adopted.

TRANSPORTATION

THE following matters were considered and dealt with by the Committee and the Department during the year:

B—Baggage—

1. General Revision of Rules and Regulations.

C—Conditions of Carriage—

1. Bulk grain bill-of-lading.
2. Ocean bill-of-lading.

Claims—

1. For overcharge.
2. For pilferage, loss or damage.
3. Checking and disposition of overcharges by railways.

Classification—Freight traffic.

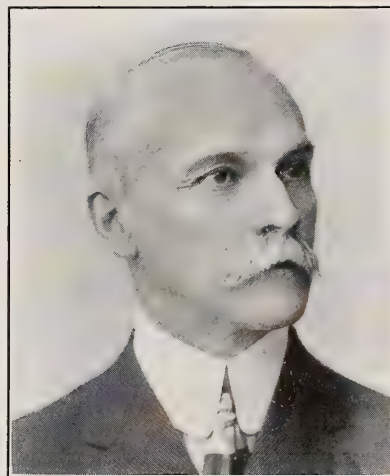
1. Proposed General Revision, Canadian Freight Classification, including C. L. Minimum Weights.
2. Applications for changes in ratings, etc., in connection with the following: Asphalt shingles; automobiles, K.D.; binder twine; baskets, fruit; boats, canoes, etc.; boxes, fruit; biscuits, etc.; bronze powders; camp stoves, K. D.; carriage rails (plated); calf meal; catsup; cobblers' sets; cotton seed oil; copper kettles; cyanamid; cylinders, iron or steel; dry cell batteries; electric motors; empty tin packages in corrug., etc., cartons; excelsior pads; fibre board; filing cases and supplies; fish; freight delivery wagons or trucks; friction clutches; grape juice and raspberry vinegar; mahogany lumber; meats, salted; mixed C. L. (applic. Calgary Board of Trade); fresh meats and Packing House products; owner's risk; pail fasteners; paper window shading; pipe fitting, cement, plowshares; pop corn; prepared roofing; redi-cut houses; stationers' paste; signs; spring hinges; three-in-one oil; toilet paper; vehicles; wallboard; wire fencing.
3. Supplement 4 to Classification 16.
4. Supplement 5 to Classification 16, proposes changes in ratings, etc., on the following: Chains; cheese; epsom and glauber salts; flax waste; furs, robes and skins; dressed hogs; lamps, self-propelling vehicle; lead; metal and metal covered doors; window frames; printers' rollers; preservatives, food and meat; salt; silo staves; tank and vat material; self-propelling vehicle parts; window guards and wire gates; wines and liquors, mixed C. L.

Car Service Rules—

1. Average agreement.
2. Reciprocal arrangement.
3. Extension free time on certain commodities.
4. Interpretation rule 2, Canadian Car Service Rules.
5. Proposed general revision.

D—Dunnage—

1. Application of railways to Commission for authority to discontinue making allowances.



MR. S. R. PARSONS

British America Oil Co., Limited, Toronto
Retiring Chairman of the Transportation Committee, of which
he has been Chairman since 1911
Elected Second Vice-President of the C.M.A., 1915-16

E—Express Traffic—

1. Revision merchandise receipt.
2. Changes in classification.
3. Revision international rates.

Estimated Weights for Shipping Purposes—

1. Carriages.

F—Freight Rates—

1. Engines and threshers, mixed carloads.
2. Enquiry into freight rates west of Port Arthur and Fort William.
3. International rates east of Port Arthur and Fort William—5 per cent. advance.
4. Joint rates.
5. Lumber from Southern United States points to Eastern Canada.
6. Transcontinental rates—class and commodity.

7. Ocean rates—export and import.
8. Commodity rates on brick, coal, lumber, phosphate rock, cement, sand, etc.
9. Proposed general advance in Eastern Canada—class and commodity.

H—Holding Cars for Orders—

1. At Cartier.

L—Live Stock Contract—

1. L. C. L. shipments fresh meats.
2. Refrigerator cars.

M—Milling-in-Transit—

1. Grain and grain products and stop-off charge east of Port Arthur.

P—Passenger.

1. Printing fares on railway tickets.

Parcel Post—

1. C.O.D. shipments.

R—Railway Act—

1. Revision of.
2. Placing water carriers under jurisdiction of Railway Commission.

Regulations—

1. Governing explosives and inflammable articles.

S—Siding Agreements—

1. Installation of private sidings.

Steamship Service—

1. Between Canadian Atlantic ports, also between New York and Pacific Coast ports, via Panama Canal.
2. Between Canada and South America.

Spotting Charges—

1. Private sidings.

Switching—

1. Local switching—proposed advance in rates.
2. Interswitching.

Storage—

1. Grain in Lakeport elevators.

T—Telegraph Rates and Contract Forms—

W—Weighing Carload Traffic—

1. Allowances from track scale weights for variation

Wharfage—

1. Application Fort William Board of Trade.

BAGGAGE.

General Revision of Rules and Regulations.

The railways have asked the Board of Railway Commissioners to approve of a new set of rules and regulations governing the transportation of baggage and excess baggage rates between stations in Canada.

Objection has been taken by the Department to the approval of the proposed rule limiting the value of the free allowance of baggage, viz., 150 lbs., for each adult passenger to \$100.00 when full fare has been paid. Other points of law affecting the liability of the carriers have been submitted for the consideration of the Board. No important

change is proposed in the regulations governing commercial baggage.

CAR SERVICE RULES.

So far no decision has been received from the Railway Commission in regard to our representations *re*:

(a) Average Demurrage Agreement, and (b) Reciprocal Demurrage. A general revision of these rules is, we are advised, being made and will be submitted at an early date for the consideration of your Committee.

CLASSIFICATION—FREIGHT TRAFFIC.

The freight classification, as the index indicates, is constantly being changed. A large number of applications for assistance in regard to changes were received during the year. Every effort is made to keep members advised of all proposed changes which would be to their disadvantage. A general revision of the classification is now on foot. In addition to this an agitation has been started in certain parts of the West for a change in the rules regarding the shipment of mixed carloads, and also suggesting an increase in carload minimums. This is an old proposition in a new dress, but it has, however, certain elements of merit, and, no doubt, will receive consideration by the incoming committee.

As regards the general revision, no one outside the railways as yet knows definitely what is proposed. It has been intimated that the proposal is to revise the rules in regard to shipping different articles in the same car and to confine carload ratings to single or strictly analogous articles. As an illustration, sugar of various kinds might be shipped in the same car, or different kinds of canned goods might be shipped together, but they could not be shipped with other articles which appear in the grocery list. The same applies to hardware or machinery. It is also intended to increase the carload minimums to correspond with the carrying or cubical capacity of the standard car, as well as to increase the carload rating on machinery and other articles of a similar character from sixth to fifth class. As regards the latter, the position is taken that it is not good classification to classify a complete article lower than the material which enters into its construction; as for example, iron and steel should not be rated higher than products made therefrom, although as a matter of fact it so happens iron and steel move altogether under commodity rates.

Your Committee has been notified that it is the intention of the railways to send us the proposed revision as soon as completed so that it may in turn be sent to our interested members for their consideration.

CONDITIONS OF CARRIAGE.

Bulk Grain Bill of Lading.

A new contract was given consideration by your Committee and it is believed that the conditions which were accepted will tend to overcome the claims of the lake carriers in respect to shortages. Briefly, the carriers assume no responsibility for shortages or overages beyond one-quarter of a bushel to each 1,000 bushels on grain moving in bulk between lake ports. Representations have been made to the Government and action has been taken which, no doubt, will result in a decided improvement in the method of handling such shipments at the elevators at the head of the lakes.

Ocean Bill of Lading.

The following resolution from the Montreal Branch was given consideration by your Committee but no definite action was taken in view of the present conditions governing ocean traffic:

"The question of the responsibility of the steamship companies for the care of goods after being unloaded from the ship and before being received by the consignee, was discussed, and it was decided to recommend that the Transportation Committee should be asked to study the matter and take steps to have proper legislation enacted to safeguard the consignee."

Live Stock Contract.

The Commission has made an order fixing the limitation of values of various kinds of live stock as follows:

Horses and Mules	Formerly \$100, now \$200
Cattle	" 50, " 80
Hogs	" 10, " 15
Other small animals....	To remain as at present, viz.: 10

The limitation on horses in carloads has been fixed at \$2,000 instead of \$1,200, and has been struck out in respect to all other animals.

The other conditions of the contract have not yet been disposed of as the Board considers it desirable that there should be some uniformity of practice and legal obligations in respect to international as well as domestic shipments. It is, therefore, awaiting action on the part of the Interstate Commerce Commission.

It is to be regretted that this matter has been held in abeyance for such a length of time. Complaints are being constantly made in regard thereto. It may be here stated that the other conditions of the contract were, with the exception of the liability of the carriers in respect to attendants, generally speaking agreed to by the committees representing the different interests. The Board, however, for the reason above stated, has so far not seen fit to give effect thereto.

The manager of the Department is secretary of the committee in charge of the live stock interests.

Whatever contract is finally adopted will apply all over the Dominion.

EXPRESS TRAFFIC.

An improvement has been made in the express merchandise receipt. Some changes have taken place in the classification and the Commission has now under consideration a revision of international rates.

FREIGHT CLAIMS.

Quite a number of old or disputed claims of different kinds have been settled during the past year as a result of the action of the Department.

Action is still being taken in regard to overcharge claims; in fact, an application has been made to the Board of Railway Commissioners for the imposition of a penalty covering the illegal collection of tolls. This course has been adopted because the railways, as a result of correspondence with the Department did not seem disposed to fall in line with our suggestion that agents be instructed to check freight waybills for overcharges in the same manner as is being done in respect to undercharges.

FREIGHT RATES.

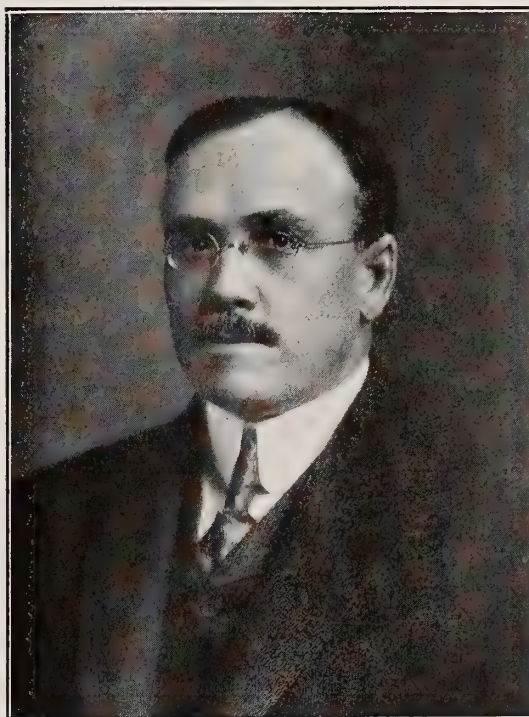
Export Rates.

The Canadian railways have made the same advances in export rates through Canadian ports as allowed by the Interstate Commerce Commission through United States At-

lantic ports. Protests have been filed with the Canadian Railway Commission by interested manufacturers against them, but no decision has yet been rendered.

International Rates—Abrogation of Section "D"—Order 3258.

When the Commission made its order in answer to the complaint of the Association regarding rates generally in Ontario and against the lower rates in effect from the United States to Canada, a clause was inserted therein requiring the publication of certain rates between Montreal and Toronto and Hamilton to meet water competition. The railways have asked the Board for relief from this condition. The application has been opposed by your Committee for two principal reasons: first, the clause in the order was part of a compromise suggested by the Commission, and second, the elimination thereof would remove the chief



MR. J. E. WALSH

Manager, Transportation Department

obstacle to a general advance in rates east of Port Arthur. Although the Board has not yet ruled in the matter, the carriers undertook to disregard the order this spring, but decided afterwards to obey it on the Board's attention being drawn to their action.

International Rates—Five Per Cent. Advance.

In the original application of the railways east of Chicago for permission to increase freight rates 5 per cent., the Interstate Commerce Commission granted it to rail carriers in Central Freight Association territory (west of Buffalo) but denied it to the lines east thereof. Subsequently a rehearing was granted and permission given to advance all rates east of Chicago with a few exceptions, such as ore, coal and coke (to which the Committee took particular objection), and lake and rail. The particular reason for reversing the original judgment was the changes due to the war. Effect was given to the decision in respect to international traffic both to and from Canada, the Canadian railways using the authority of the Interstate Commerce Commission to advance rates on traffic originating in Canada destined to points in the United States. Protests

against this action have been made to the Canadian Commission and are now under consideration. In the meantime the higher rates have been allowed to go into effect.

Lumber Rates from Southern United States Points.

A temporary arrangement has been made in regard to rates on this traffic, which it is believed is fairly satisfactory. The trade has been advised thereof.

Ocean Rates.

Shortly after the outbreak of the war the Department, acting in co-operation with the other Departments, secured information as to the best available routes and service to the West Indies and South America, this information being published in *INDUSTRIAL CANADA*.

The Department is in a position to furnish reliable information at any time in regard to export traffic to all parts of the world.

A resolution presented at the last Annual Convention asking that the Association recommend that the Dominion Government establish a service on the Atlantic to carry flour and similar products was referred to and given due consideration by your Committee. It was its view that if the Dominion Royal Commission did not offer a solution satisfactory to the milling interests, a recommendation should be made to the Executive Council to call upon the Government to take steps to secure relief from what appeared to be excessive charges bearing heavily upon the millers of this country. As the Dominion's Royal Commission, owing to the war, has not yet held any meetings in Canada no further action has been taken.

Proposed Increase in Domestic Rates in Eastern Canada.

The railways through the Canadian Freight Association applied to the Commission in February last for permission to increase freight rates generally in Eastern Canada. An analysis of the application was published in the March number of *INDUSTRIAL CANADA*, and members with specific commodity rates were specially advised by letter of the proposed advances.

Some of the principal reasons urged in support thereof are:

1. That it is in the interests of the country at large as well as the companies and their shareholders that further revenues should be obtained from the carriage of freight traffic;
2. That the net operating income has seriously declined, due to the steady and constant increases in wages, legislative requirements and the maintenance of a high standard of efficiency;
3. That the return upon money invested in railway facilities in the territory affected is inadequate;
4. That the effect of these factors is to diminish seriously the borrowing powers of the companies;
5. That, in consequence of the exceptional conditions at present existing, various money markets previously open to the companies are now closed;
6. That the Interstate Commerce Commission after a full hearing made an order increasing rates in the territory to the south.

A deputation from the railways waited upon your Committee in support of the above and were assured that their representations would receive careful consideration. Your Committee was given full authority by the Executive Council to deal with this question in whatever manner was thought best. It may be here stated that the

application is not worked out upon any fixed basis, but is rather one for permission to make a general revision of freight rates, class and commodity, in many instances without regard to their present relationship. This means in some cases very serious advances, particularly on short haul traffic.

The Commission is also asked to overrule its order in answer to the complaint of the Association directing a general revision of rates throughout Eastern Canada and the removal, as far as possible, of the discrimination in favor of foreign manufacturers.

These facts, as well as others of a similar character have been brought to the attention of the Commission. After the first hearing before the Commission, which was taken up by the representatives of the two principal railways in presenting statistics of revenues and expenditures, your Chairman made the following presentation at sittings of the Board in Montreal, on March 18th, on behalf of the Association as a whole:

"The application of the Canadian Freight Association, on behalf of the railway companies, to the Board of Railway Commissioners for permission to make a general increase in freight rates for Eastern Canada, is one of the most important matters that has ever been brought before the Board.

"At the outset, I wish to make it quite clear that we do not come forward at this time objecting to the entire proposition of the railways for an advance. We recognize the fact that the railways must live, and do business with a reasonable profit. The question of an advance in freight rates is, however, involved to such an extent with other matters that should, in our estimation, be considered at the same time, that we take advantage of this opportunity to sum up the situation as it presents itself from our standpoint.

The Cost of Improvements.

"It may fairly be said that we are demanding on the part of the railways better and safer road-beds, double tracking, more adequate terminals, and improved equipment throughout, in order to secure more satisfactory service for passenger, as well as freight traffic. The railways feel it incumbent upon them, as far as possible, to meet these demands, and they must do it, either by providing funds out of net profits, or by additions to capital stock. In some cases it is understood that our railways have spent many millions during the past few years out of their net returns, for betterments such as above indicated. This policy has probably prevented them from paying dividends upon their capital stock, and, therefore, on this very account, it is harder for them to raise additional capital in the money markets of the world. In such cases it might well be asked if this is a condition calling for higher freight rates? It is like a manufacturer putting all his profits into increased construction, equipment and betterments, thus preventing dividends being paid to shareholders, and then seeking to right the situation by advancing prices to customers.

A Huge Capitalization.

"The capitalization of all Canadian railways is now stated to be about two billions of dollars, which is quite a tidy sum for a young country to pay interest upon. A recent Ottawa report states, 'The rapid increase in new mileage during the past few years is evidently considerably in excess of the country's demands for freight and passenger traffic, and the decrease in net earnings, coupled with the immense increase in capitalization, is one reason for the present application to the Railway Commission for an increase in freight rates.' There is a widespread belief to-day that we

have more lines of railway than are required to serve our present needs in Canada. We all hope and believe, however, that in the course of a number of years we will have progressed to a point where all our transcontinental lines will be needed, and where the new territory in Ontario, as well as the far west, which these and other lines are opening up, will be freely settled with traffic-producing population, thus contributing in a large measure towards curing the present overloaded condition. Unfortunately, however, branch lines have been built, for which there does not appear to be any profitable traffic in sight. Such lines have paralleled other lines, without serving new territory, and by the very competition which has thus been engendered, all the lines have been forced to provide equipment of the highest order. If such lines prove to be unprofitable, who should be called upon to make up the loss? If these lines are a drag on other lines which were necessary in the interests of the country, should the public be made to suffer in consequence by the exaction of higher freight rates? On the contrary, should it not be the duty of the various governments of the country that have chartered, subsidized, and guaranteed the interest on bonds, etc., especially of lines which could not be looked upon as paying properties, to consider, as trustees for the people, how such roads should be maintained? The Board of Railway Commissioners, not having been consulted in connection with the projection of these new lines, have, we believe, a somewhat difficult duty to perform in the settlement of this question of higher freight rates, which perhaps would be better considered conjointly with the governments involved.

Are Earnings in Proportion to Expenditure.

"The railways make the statement that, since 1909, on account of governmental regulations, taxes, the orders of the Board of Railway Commissioners, and the great increase of wages, the cost of doing business has been enormously increased. These are statements which are, no doubt, entirely correct, and should be given due consideration. On the other hand, consideration should also be given to the gross yearly earnings of the railways since 1909, with a view to seeing whether these have increased in proportion, and whether the railways are not actually earning a greater net amount on their capitalization than before. Many a manufacturer finds that since 1909 his payroll has increased enormously, and that, in the way of taxes, regulations, workmen's compensation contributions, etc., he is paying a huge additional amount in increased expenses. The larger volume of business obtained in these years, however, has made it possible for him to make as good a net return on his capital as before, notwithstanding these increases in expenses. This might also prove to be the case in connection with railway undertakings.

How Manufacturers Would be Affected.

"So far as the proposition to increase freight rates on coal, raw materials, and other manufacturing necessities is concerned, this would bear very hard at present upon manufacturers, many of whom have been loyally keeping their plants running as far as possible, even at an actual loss, in order to protect their workmen, and keep alive their organizations. In some cases manufacturers sell their products under contract to the end of the year. Many such contracts are now in existence, and to this extent the proposal to increase freight rates, where a delivered price has been agreed upon, would be only adding to the, at present, very heavy burden of the manufacturer. Of those not bound by contracts, many others would find themselves unable to advance prices, by reason of established trade practices and other

causes, notwithstanding the fact that their raw materials would, under the new proposition, cost them considerably more.

"To this line of argument the answer will be raised that, in the course of time, the manufacturer will succeed in passing his increased cost along to the wholesaler or to the retailer, who in turn will pass it along to the consumer, but such a solution is to be avoided, because of the fact that it would add to the high cost of living, a burden which it should be our common endeavor to alleviate rather than to accentuate.

"Largely increased freight rates might act as a deterrent to business, particularly between Ontario and the Lower Provinces. Higher railway freight rates would, no doubt, be followed immediately by higher rates of the carriers by water, now that their interests have been largely merged into one concern. In passing it should be mentioned that the immense sums being expended for the deepening of the Welland Canal, and improvement of other waterways and harbors, may become altogether ineffective in cheapening transportation costs, as intended, owing to certain combinations and regulations.

Present is Abnormal.

"It is possible, too, that the present world-wide depressed conditions affecting all interests are so acutely felt by the railways that temporary conditions are unwittingly magnified to appear as those prevailing in normal times. There should be a distinct differentiation between prevailing conditions, and those which might be considered more regular and stable. The years 1909 to 1913, inclusive, should, we think, form a fair basis for building up any records upon. We believe that railways just at present are suffering more from a lack of business than from unremunerative rates. In this, of course, they are simply on a par with the large majority of other commercial interests of the country. Many manufacturers are confronted with diminishing business, higher costs, and even lower selling prices.

"There is no disposition whatever on the part of the Canadian Manufacturers Association to be unfair or unjust to the railways of the country, or to get from under any burdens which should properly be placed upon their shoulders. We cheerfully recognize the fact that the railways spend money freely, and at the present time the expenditure of large amounts would be of particular help to the country at large. If the railways would make purchases in Canada, of Canadian-made products, they would thus directly help the manufacturers. While recognizing all this, however, in view of the foregoing remarks, we believe that this is altogether too big a question, and involves interests that are too far-reaching to be answered offhand. It is desirable that, as far as possible, there be stability in freight rates, as in the customs tariff, and we think the time has come when a thorough study and survey of this intricate question should be made, in the interests of the railways on the one hand, and the public on the other. If the results of such a study and survey point convincingly to the fact that the real remedy for the troubles of the railways is higher freight rates, notwithstanding that carriers have other sources of revenue, and that this is the proper solution of the question as affecting all parties concerned, the manufacturers will not object to bearing their share of the burden, properly adjusted. This, however, should be made clear to the Board."

Subsequently the Executive Council at the meeting of March 25th, approved of the following resolution:

"Resolved, That the Transportation Committee of the Canadian Manufacturers Association recommend to the Executive Council the endorsement of the representation made by

the Chairman, on behalf of the Association, to the Board of Railway Commissioners, at the public sittings held in Montreal on March 18th, 1915, in the application of the Canadian Freight Association for authority to make a general increase in freight rates in Eastern Canada, and that whilst expressing every confidence in the Railway Commission, it is the opinion that it should of its own motion cause a thorough investigation to be made of the statements and representations of the applicants and of all their sources of revenue, and expenditure, for the purpose of determining whether or not it is proper at this time to grant the application."

This was placed before the Railway Commission at sittings in Toronto, on March 29th.

A large number of complaints have been made to the Board in regard to the proposed increase in commodity rates and assistance has been rendered members in presenting their objections. There has been a good deal of feeling in regard to the procedure in this matter, the tendency being to require the public to show cause why the rates should not be advanced. Apparently the reason therefor was the desire of the Board to ascertain if possible the extent of the objections to the proposed increase and its effect on general business. Notwithstanding the above, your Committee adhered to the position taken by the Chairman, namely, that this was a matter to be decided by the Commission and that evidence of a general character would not be of material assistance in determining the merits of the application.

In view of the attitude of your Committee, confirmed by the Executive Council, it is very satisfactory to note that at the final hearing for the presentation of evidence at Ottawa, on May 18th, the Chairman of the Commission said:

"The Board has already said that no matter how faulty the information or how slight the information may be that either counsel or traders or anybody else chooses to give us during the course of an enquiry, the burden is still on the Board. The Board must take the responsibility, and will take the responsibility entirely irrespective, as I say, of any accident which may happen one way or the other, during the course of a hearing, of determining whether or not the railway figures are correct. That is something which we have to take the full responsibility of and we intend to take it. Whether that will be done to-day or to-morrow, there is one thing quite clear that before the Board deals with the question it will be done. We have expected to get assistance and we have had assistance from traders and others as to the effect upon their particular business. That is something that is within their knowledge much more than it is within the Board's knowledge, and that information undoubtedly will be helpful information."

Your Committee has every confidence that the Board will deal with this question in the best interests of all concerned. The Board had not, at the time of writing this report, fixed a date for the final argument.

Rates West of the Great Lakes.

The last annual report contained a synopsis of the judgment of the Board in this matter. The order giving effect thereto is as follows:

"It is ordered that the terms of the judgment, which is hereby made part of this order, and the tariff changes therein directed to be made, be complied with and become effective not later than the first day of September, 1914;

"And it is further ordered that for a period of two years from the date of this order, no rates at present in effect West of Port Arthur, Ontario, be increased without the approval of the Board."

It will be observed that the carriers are prohibited from changing rates for a period of two years without first receiving authority from the Board.

Transcontinental Rates.

The Canadian railways have severed their connection with the Transcontinental Freight Bureau, with headquarters in Chicago, and have published their own commodity tariff, effective June 1st, 1915, from Eastern Canada to the Pacific Coast.

A large number of items have been left out of the new tariff for two reasons, first, because they were struck out of the U. S. Transcontinental tariff, effective November 15th, 1914, as a result of the order of the Interstate Commerce Commission in the Spokane rates case; and secondly, because it is stated that there has been no movement of the commodities previously covered. Some complaints have already been received in regard thereto, and have been placed before the proper traffic officials. Assurances have been received from them that every consideration will be given to our representations, as there is no desire to put any obstacles in the way of a free movement of traffic to the Pacific Coast.

Commodity Rates.

During the year a number of commodity rates necessary to enable members to meet foreign competition have been published by the railways. A number of specific commodity rates have also been dealt with and assistance rendered members in connection therewith.

Minimum Carload Weights.

Advances have been made therein on building materials. A general revision upwards is to be submitted by the railways in connection with the proposed general revision of the Canadian Freight Classification.

Revision of Railway Act.

The proposed revision of the Railway Act was not taken up by Parliament during the past year. A special bill placing carriers by water under the control of the Railway Commission was introduced. This was objected to by your Committee, and the Manager of the Department placed in a general way these objections before the Railway Committee of the House of Commons. At the request of the Honorable the Minister of Railways and Canals the bill was withdrawn.

Regulations Governing Transportation of Explosives and Other So-called Dangerous Articles.

A new set of regulations has been submitted by the railways, proof copies of which have been sent by the Department to all interested members for their objections or suggestions.

It is the intention to meet representatives of the railways to consider these objections when filed and afterwards the railways will ask the Railway Commission to approve of the rules as finally agreed upon.

The proposed rules place serious obligations upon manufacturers which do not now exist, and should, therefore, receive careful consideration. Once they are approved by the Commission they become law and cannot be departed from. Members who have not yet considered them should do so without delay.

SIDING SERVICE.

Placing Cars on Private Sidings.

Arising out of certain suggestions of counsel who acted for the Interstate Commerce Commission in the application for permission to increase rates 5 per cent. east of Chicago, an attempt was made by the railways in the United States to make a separate charge for placing cars on or taking them from private sidings. This question came up in a somewhat different form in Canada, in connection with an application of one of our members to the Railway Commission for a private siding. The respondent railway company took the position that under the Railway Act they were entitled to compensation for what they considered the extra service involved in the application. As the Board had ruled that it would not depart from the general practice in such matters, an appeal to the Supreme Court was allowed, notice thereof having been served on the manager of the Department. Application was then made to allow the Association to intervene because of the possible effect of the decision of the Supreme Court upon the general practice. Subsequently, a very comprehensive judgment was written by the Chief Commissioner, with which the Court agreed and the appeal of the railway company was dismissed with costs.

Steamship Service via Panama Canal.

Your Committee has given considerable thought to the advisability of recommending to the Government the subsidizing of a steamship service between Canadian Atlantic and Pacific Coast ports. The investigation made, however, even if general conditions were favorable, would not justify such a recommendation. Up to the time the war broke out there was a line in operation between New York and Vancouver known as the Maple Leaf Line, consisting of British vessels owned by the United States Steel Corporation. These vessels have since been put under United States register.

Previous to the change of register certain interests asked the Government at Ottawa to place a Canadian Customs Officer at the Port of New York, so that Canadian goods might be shipped to the Pacific Coast via that route. This request was refused.

A conference between Eastern manufacturers and Pacific Coast jobbers, was held in Toronto in February last. After a thorough discussion the following resolution was unanimously adopted:

"That the subject of competitive freight rates having been fully discussed, it is resolved that this meeting request the Transportation Committee of the Association to recommend to the Executive Council the appointment of a deputation of interested manufacturers to visit the Government and request that a Customs Officer be appointed immediately at the Port of New York, in the interests of Canadian manufacturers doing business in the Province of British Columbia."

Since the meeting a new phase of the question came up, namely, through the withdrawal of a number of steamers from the coastwise, service rates between New York and the Pacific Coast were materially increased. In addition to this the Interstate Commerce Commission granted the United States transcontinental lines permission to make special low commodity rates on a number of commodities to meet competition via the canal. Although it was expected that some action would be taken to give effect to the latter, nothing has been done.

These questions were all given careful consideration by your Committee, as a result of which the General Secretary asked the Right Honorable the Premier for an appointment to hear what the interested manufacturers had to say on the

subject. Up to the time of writing this report, no date had been fixed for same.

SWITCHING AND INTERSWITCHING.

Switching—Local.

The railways consider that they are entitled to increased rates for local switching, particularly in the large centres, and the matter has been the subject of several hearings before the Commission. Some of the applicants, in support of their contention filed voluminous exhibits. It was suggested to the Board by the Department that these statements should be properly analyzed by operating experts, and your Committee has reason to believe that this is being done.

Interswitching.

As reported at the last Convention the railways in a number of instances disregarded the order of the Railway Commission, particularly in respect to deliveries to and from team tracks. The matter has repeatedly been brought to the attention of the Board, and a number of hearings have been held. The Manager of the Department, at a hearing in November last, reviewed at length the whole case. The railways asked for some further time to reply thereto. No advice has been received that these replies have been filed with the Commission. The whole question of switching in all its branches is in a somewhat chaotic state.

Some Matters Outstanding.

Some of the matters still outstanding are:

(a) *Enquiry into Telegraph Rates and Contract Forms.*

The last annual report of your Committee on this subject was as follows:

"Your Committee has reported in this matter to the past two Conventions as follows:

" 'This enquiry, although considerably delayed, has been practically concluded, and it is hoped will be disposed of satisfactorily without much further delay.' "

"As far as can be ascertained, the whole question has been in the hands of the Board of Railway Commissioners for some time.

"The enquiry arose out of the application of the companies to the Commission in 1910, to approve of the rates and forms used by them. It is to be regretted that there has been so much delay in disposing of this important matter, and your Committee recommends that a resolution be adopted at this Convention urging for an early disposition of same."

The matter is still with the Railway Commission and in the meantime the limited liability exists.

(b) *Joint Freight Rates.*

The Board has had this matter in hand for a considerable length of time. Recently the carriers were called upon to say why rates should not be published on certain commodities. The railway representatives are not disposed, however, to take any action.

There are other matters which will, no doubt, receive the attention of your incoming Committee.

Two resolutions have been recommended to the proper Committee to be presented to you. It is hoped they will receive your favorable consideration.

All of which is respectfully submitted.

G. M. MURRAY,
Secretary.

S. R. PARSONS,
Chairman.

J. E. WALSH,
Manager Transportation Department.

Siding Service.

During the reading of the report Mr. S. R. Parsons, the Chairman of the Committee, made the following remarks with reference to "Siding Service": "To the individual members who have private sidings and do a great deal of shipping, involved in this question, there was an underlying proposition which would have permitted the railway companies to make an extra charge for any cars placed upon private sidings or drawn therefrom. Therefore the judgment which has been rendered has saved indirectly hundreds of thousands of dollars a year, which members of the Association would have paid out had the railways had their own way in that one matter."

In regard to the steamship service via the Panama Canal, Mr. Parsons said: "Since this report was placed in the hands of the printer Sir Robert Borden intimated to the Association that he would be glad to meet this Committee, and consequently the Committee assembled at Ottawa and had a conference with Sir Robert and those of his Ministers particularly interested. They received a very cordial hearing and reception at the hands of the Premier and his Ministers. The question which they brought forward was discussed very frankly by Sir Robert Borden as well as his Ministers. I may say that the main consideration which the British Columbia jobbers and interested managers put before the Association was this, that owing to the fact that eastern United States manufacturers could ship their supplies to western coast points by water at a very low rate, Canadian manufacturers being unable to use that route, but having to ship only by rail, could not meet such competition. These western jobbers, including some of our members in Vancouver, asked that a customs officer should be appointed at the port of New York so that they would have the advantage which the United States eastern manufacturers have of shipping by water from New York to the Pacific Coast. I understand that one of the principal arguments which Sir Robert Borden brought forward against that was this,—while some manufacturers in Canada

could ship certain products by way of New York by the route proposed to the western coast at a lower rate than they now could by all rail, and therefore would be able to meet more or less the competition of the eastern United States manufacturers, yet, if the route were once used and a customs officer appointed at New York, there would of necessity follow the loss of their goods by that route which now the Canadian railways took by all rail to the West. This would be therefore somewhat hurtful to our railways, and these were times when the Canadian railways should not be hit any harder than could be helped. That was one of the reasons I think for his suggesting that more thorough consideration should be given to this question. Sir Robert and his colleagues promised they would give us their answer later."

The Importance of Freight Rates.

"Every railway has its transportation department," said Mr. J. F. Ellis; "its officers spend the whole year in looking over and adjusting freight rates. We are quite sure that they never make any change or never suggest any change unless it is intended to increase their revenue, and it becomes us therefore to be alert and watch every step they may take. The question of increased freight rates for eastern Canada during the year has been the most important subject for us to consider."

"I hope that the resolutions which are to be brought in will propose a broad national railway policy for Canada, which we have not had in the past," said Mr. R. D. Fairbairn. "Our railways have been permitted to be built by railroad speculators and the final cost comes back on the people in the form of increased freight rates to cover up overcapitalization. I hope these resolutions will lead to some definite results, because at this time we must look forward to great expansion in Canada when this war is over, and you will never increase your business as it should be unless your transportation question is properly handled. The question is too big for a party question; it should be dealt with irrespective of either party, and be a national railway policy."

LEGISLATION

Company Licensing

THE situation with which your Committee have had to deal for a considerable number of years past has been radically altered by the decision of the Privy Council some months ago in the John Deere Plow Company case. It will be recalled that the Association had interested itself in this case as a means of securing a decision upon the question of the validity of the licensing laws of the different provinces, whereby Dominion companies were required to become practically re-incorporated in every province in which they sought to carry out their corporate objects. The validity of the statutes had been questioned from time to time since the provinces began to adopt them, some fifteen years ago, but no case had been taken to the appellate courts, and the statutes constituted a constant menace to inter-provincial commerce by reason of the doubts which they created as to the status of unlicensed companies in the provincial courts.

In their last annual report your Committee expressed the hope that in giving judgment in the John Deere Plow Company case, which was then ready for hearing, the Privy Council would deal with the question on a broad general

basis which would make it possible to advise as to the validity not only of the British Columbia Act, which was in question in that particular case, but also as to the varying provisions of the Acts of the other provinces. This hope your Committee are glad to say has been realized. The argument of the case was full and comprehensive, the Province of British Columbia and the Dominion Government both being represented. Their Lordships had also before them the questions relating to extra-provincial licensing embodied in the general Companies Reference, and the judgment of the Lord Chancellor was written with the evident view of avoiding dealing with the subject a second time on the Companies Reference.

The decision has had an immediate effect in provincial legislation, which has exhibited, however, a remarkable difference of view amongst the Provincial Departments as to the precise effect of the John Deere decision.

The Province of Alberta, frankly admitting the full effect of the decision, has amended its Foreign Companies Act by specifically excepting Dominion companies.

The Province of Saskatchewan, which inherited the same



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Foreign Companies Act from the old North-west Territories, has gone to the other extreme by incorporating the provisions of the Foreign Companies Act with the provisions of its regular Companies Act in a bill at the time of writing before the Saskatchewan Legislature, in which it is sought to compel Dominion companies to "register" as if they were companies becoming incorporated under the Saskatchewan Companies Act.

The New Brunswick Legislature has attempted to retain the full effect of its Extra-Provincial Licensing Act, including the provisions prohibiting unlicensed companies from suing in the courts, but has changed the word "licensed" to "taxed," apparently purposing by a change in terminology rather than substance to save the Act from being invalid.

In Nova Scotia the provisions prohibiting unlicensed companies from maintaining actions have been removed, but companies, whether Provincial or Dominion, which "do or carry on" business in the province, are required to be "registered."

The Provinces of Manitoba and Ontario have not made any amendments to their Acts, but the departmental officials have assumed the position that the Acts were untouched by the John Deere decision, though the action of the other provinces has considerably weakened the departmental view.

The question is not only as to the necessity of Dominion companies registering in the future, but of maintaining their registration by paying the annual fees. A question of serious consequence also is that of the liability of the province to refund the fees previously paid by Dominion companies. If the Acts are invalid there is no doubt as to the legal liability of the provinces to refund these fees, and a considerable number of companies have taken tentative steps looking to their recovery.

Dominion Charters.

One of the results of the John Deere Plow Company decision has been an increase in the number of Dominion incorporations so large as to necessitate a considerable addition to the staff of the Dominion Companies Department. There has been a corresponding reduction in the number of provincial incorporations. This effect has been heightened by the decision of the Supreme Court in the Bonanza Creek Mining case, in which it was held that a company with an Ontario charter was inherently incapable of carrying on mining in the Yukon Territory, notwithstanding that it had a foreign company license from the territory to do so. The decision was on a broad, general basis, and had in view the expressions of the Privy Council in the John Deere Plow Company case as to the relative jurisdiction of the Dominion and the provinces over the incorporation of companies. It would apply equally to manufacturing companies. It means, if it means anything, that a company incorporated in Ontario for the purpose of manufacturing cannot manufacture outside Ontario. It may mean that a company incorporated in Ontario to buy and sell cannot buy and sell outside of Ontario. It is now on appeal to the Privy Council, and is to be heard along with the general Companies Reference at the present sittings of the Privy Council.

In this connection it should be pointed out that it is of the utmost importance where it is intended to charter a Dominion company with authority to carry on business throughout Canada that charter should be so drawn as to bring the company within the terms of the John Deere decision. Many charters have been issued within the past few months which, in the opinion of the Legal Department, not only fail to take advantage of that decision, but which may actually fail to give the company any real status. There is a certain class of companies which the Dominion alone can incorporate. There is another class which the provinces alone

can incorporate. It is important that the charter should be so drawn that it is not attempted by a Dominion charter to incorporate a company with provincial objects.

The Companies' Reference.

This, it will be recalled, is a series of questions addressed by the Governor-General of Canada to the Supreme Court of Canada touching the jurisdiction of the Dominion and the provinces over the incorporation and licensing of companies. The questions cover broadly the same ground as the Bonanza Creek Mining case and the John Deere Plow Company case, namely, whether a provincial company can operate outside the province and whether a Dominion company must take out provincial licenses. The Supreme Court had answered the questions in a somewhat equivocal manner, which was



MR. J. R. SHAW

Canada's Furniture Manufacturers, Limited, Woodstock
Re-elected Chairman Legislation Committee, 1915-16

regarded by the provinces as substantiating their side of the case upon both points. The answers left the matter in such uncertainty, however, that the provinces themselves appealed to the Privy Council against the answers of the Supreme Court.

It may well be imagined that companies have found it no easy task to decide whether to continue to admit provincial jurisdiction by paying the licensing and registration fees or whether to take issue with the provincial departments by refusing to comply with the Acts. This question, together with the question of taking steps to recover the fees previously paid, has occupied a large share of the attention of the Legal Department. Your Committee was called upon to consider if and to what extent the Department should be asked to interest itself in contests which individual members might have over these questions. As the Association had been instrumental in securing the decision in the John Deere Plow Company case it was not unnatural that members should look to the Association to vindicate the views which had been established in that case. Your Committee, however, felt that in carrying the matter through to a successful conclusion in the John Deere Plow Company case the Association had done its part, and that any action by way of applying the principle

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of that case should be taken up by the companies interested. Your Committee thought that there should be no objection to leaving the services of the Legal Department at the disposal of members in this subject, as time permitted, on the understanding that any expense incurred should be met by the companies directly interested. A large number of inquiries and suggestions from individual members resulted in meetings at Toronto and Montreal of representatives of the companies interested to consider some common course of action in regard to difficulties which the companies already had or anticipated having with the different provincial departments over their status in the provinces. It was soon apparent, however, that none of the provinces were prepared to accept a direct issue, but that the expectation was that the matter would be reopened and further gone into on the hearing of the Companies Reference.

Your Committee had in the meantime instructed Mr. Wegenast to file a brief before the Privy Council in the Companies Reference, the idea being, that the Association would not be represented by counsel on the hearing. It has since become evident that a serious effort will be made by the provinces to secure in the Companies Reference some modifications of the full effect of the John Deere decision, and it would appear to be of considerable importance that the companies should be represented at the hearing. At the same time your Committee have not felt free to alter their decision with regard to the further participation of the Association in the case. If the view of the Committee should not be in accordance with the views of the annual meeting the Committee will be glad to receive and act upon any instructions the meeting may give.

Some Problems.

The Legislation Committee will have some difficult problems to deal with during the coming year. Whatever may be the result of the Companies Reference, there will be a readjustment in the whole field of company organization and control involving many millions of dollars in capitalization. It is not improbable that the Canadian Manufacturers Association, as the most representative of the business organizations of the country, will be in a position to be of service in the solution of the problems which are now a field of contention amongst the different governments. The situation may be expressed by saying that the provinces and the Dominion respectively represent two opposing schools of medicine trying out their opposing theories at the same time upon the business community as a patient—with the interest of the patient not always uppermost in the minds of the experimenters. If the patient is sufficiently docile the experiments may continue, but if it is not altogether out of place for the patient to offer some suggestions as to the handling of the case, it would appear in order that the business organizations of the country should co-operate in suggesting to the disputants some other way of settling their differences. A number of courses of action are open, and it may be the function of the Canadian Manufacturers Association to take the initiative in one or more of them:

First, it may be that a conference should be called of representatives of the Dominion and the provinces to discuss the whole situation and endeavor to arrive at some agreement; in default of which other means and remedies may have to be considered.

Second, it may be necessary to secure Imperial legislation validating retroactively the transactions of provincial companies if such companies are shown by the Companies Reference to have exceeded their powers.

Third, it may be found desirable to urge upon the Dominion Government, that pending a solution of the whole problem,

no further provincial legislation upon the subject should be allowed to go into operation.

Suggested Solution.

As a concrete suggestion for a permanent solution of the problem of company organization and control your Committee have given some consideration to the suggestion that all commercial companies might be incorporated under Dominion legislation, the charters being issued by the Provincial Secretaries acting as deputies of the Dominion Government and turning the fees wholly or partially into the provincial revenues. As the problem, so far as the Dominion



MR. F. W. WEGENAST
Secretary of the Legal Department

is concerned, is one of securing some form of centralized administration assuring adequate authority and at the same time adequate control, and the chief concern of the provinces is the revenue derived from incorporation, this proposal would seem to offer a solution satisfactory to the Dominion and the provinces, and at the same time to the commercial companies.

Your Committee have reason to believe that in dealing with these matters the Association may rely upon the co-operation of such bodies as the Associated Boards of Trade, the Canadian Credit Men's Association and the Canadian Bar Association, and they are confident that, notwithstanding the magnitude of the questions and the interests involved, if they are taken up with courage and good judgment, satisfactory results can be obtained.

Patent Law Reform.

Your Committee have supported the representations which have been made to the Dominion Government asking that a commission be appointed to investigate the whole subject of patent law and administration in Canada. There are certain deficiencies more or less apparent in the present administration. To the following your Committee have tentatively agreed:—

(a) There is no adequate classification of patents for the use of examiners in determining the novelty of inventions;

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(b) There is practically no interchange of copies of patents between Canada and most other countries except England, France and the United States, leaving Canadian patentees to shift for such material for themselves;

(c) The staff of the patent office is too small to admit of sufficient specialization to secure efficiency in the different classes of inventions, the result being that patents which are issued do not represent, as they purport, an adequate search as to conflicting patents and an assurance of the validity of the patents;

(d) The Department turns over to the Government a substantial revenue, whereas all the fees taken in and additional grants should be employed in promoting what should be the real aim of the Department, namely, to encourage and safeguard invention and the investment of capital in industries;

(e) The patent office ought to be removed from its anomalous position under the Department of Agriculture, and, combined with the administration of trade-marks, trade-names and copyrights, should be placed under a more suitable Department, such as Trade and Commerce or the Department of Customs.

Your Committee feel that the above items represent a situation shown *prima facie* to exist which demands careful attention on the part of the Government, more particularly in view of the reconstruction and readjustment which must be looked forward to at the conclusion of the war.

Bankruptcy Legislation.

No further definite steps have been taken in the matter of bankruptcy legislation, but the Legal Department has been acting under instructions to keep in touch with the Government and with other public bodies such as the Canadian Bar Association upon the subject with a view to safeguarding the interests of manufacturers in case legislation is brought in. Your Committee feel that this is another subject that ought to receive the most careful attention of the Government as a factor in the readjustment incidental to the war.

Other Matters

Apart from workmen's compensation legislation, which has been dealt with by a special committee, there has not been so much legislation as usual of interest to manufacturers.

In New Brunswick legislation respecting hoisting engineers was brought in in a form to which your Committee have had to take objection in other provinces, the bill being designed rather to create a "corner" in the labor market than to safeguard life and property. After considerable effort in co-operation with the Legal Department the New Brunswick members of the Maritime Branch were able to secure satisfactory amendments.

Your Committee are disposed to submit also for the consideration of the annual meeting the question whether something cannot be done to overcome the tendency on the part of the Legislatures of some of the Western provinces of Canada to enact legislation without due regard to the principles of fairness, without which legitimate business cannot be conducted. Legislation ranging from the purely vexatious to the absolutely confiscatory is becoming so common as to be regarded with stoicism; but whatever may be the explanation of the tendency, the tendency itself is wrong and perhaps it may be possible to find some remedy.

J. R. SHAW,
Chairman.

F. W. WEGENAST,
Secretary.

G. M. MURRAY,
General Secretary.

When he finished reading the report, Mr. Shaw, the chairman, said: "I beg again to call your attention to the

fact that your committee has left in your hands the question of whether this Association shall bear the expense of appearing before the Privy Council in the matter of the companies' reference and endeavoring to secure a judicial decision that will have great effect in settling this most vexed question, or whether you will wash your hands of the whole matter and leave it to those companies in the Association with Dominion charters to get together and carry on this litigation at their own expense."

Mr. R. D. Fairbairn strongly urged that the Association bear the expense of continuing the companies' reference case before the Privy Council. It was a matter of the utmost importance and should not be abandoned until concluded satisfactorily.

Mr. White: "The Conditional Sales Act should be a Dominion Act and not a Provincial Act. The Legislation Committee have done so well with the Companies Act in creating a Dominion Act that I think they should follow it up by making the Conditional Sales Act a Dominion Act as well. The actions of the Legislatures of some of the Western Provinces are such that they make wards of the populations of those different provinces. They are wards of the Government almost as much as the Indians are, and I think that this Legislation Committee cannot do better than to act along the line that will make the Conditional Sales Act a Dominion Act."

On motion of the Chairman, Mr. Shaw, seconded by Mr. Saunders, the report of the Legislation Committee was adopted.

Mr. Phillips, seconded by Mr. Tindall, moved that the matter of dealing with the companies' reference case be left in the hands of the Executive Committee to deal with as they see fit.

Mr. Tindall explained the extreme difficulty of getting cases that would secure the decisions desired from the Privy Council. All the points had to be covered, and the expense involved was beyond the means of the majority of companies, and should be borne by the Association.

Mr. Waterous described the difficulty of collecting accounts in several provinces, owing to the extraordinary protection given to dishonest purchasers by the laws.

Mr. Saunders thought the question should be thoroughly discussed at the convention, in order that the views of the various manufacturers might be secured.

Mr. Phillips' motion was carried, and the question will be decided by the Executive Committee.

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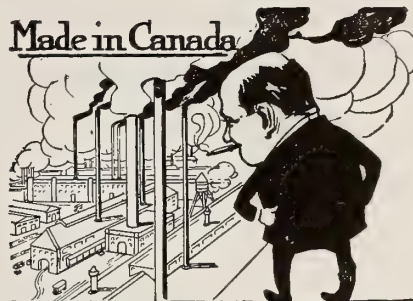
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WORKMEN'S COMPENSATION

THE greater part of the work of your Committee during the past year has arisen out of the development of the Workmen's Compensation Act which was adopted by the Ontario Legislature last year and which came into active operation on the 1st of January of this year. As the general scheme of the Act had been the proposal of the Canadian Manufacturers Association it was natural that a keen interest should be taken in the working out of the scheme; but your Committee were still more interested in the many important problems which had arisen because of the vague and impracticable form in which the scheme had been embodied in legislation. If any proof had been wanting of the criticisms from time to time voiced by the Canadian Manufacturers Association as to the character of the Act it was furnished by the fact that at the session of the Legislature this year, after the Act had been in operation for only two months, an amending Act was adopted consisting of thirty-four sections. It was natural to expect that in framing these amendments the interests generally concerned, that is to say the employers (for scarcely any of the amendments dealt with any phase of the Act of interest to workmen), should have been consulted. Your Committee regret to say that no opportunity was afforded them of taking part in the discussion of the amendments. Before any amending bill had been introduced in the House the Chairman presented to the Government certain suggestions for amendments, but was informed that it was too late, the amendments having already been drafted by the Workmen's Compensation Board.

Representation in Legislature.

In this connection your Committee desire to advert again to a subject which was discussed at the last Annual Meeting, namely, the absence of any adequate representation in the Legislature, not only of Ontario but of the other provinces, and for that matter the Parliament of Canada, of the manufacturing interests of the country. It is sufficiently difficult under a party system of government for practical business men to secure fair and reasonable legislative treatment, but the difficulty is almost insuperable when, instead of having their fair proportion of representation in the legislatures and caucuses, the business interests are represented inadequately or not at all. If business men do not interest themselves in legislative and political affairs it is perhaps not to be wondered at if politicians fail to give to the opinions of business men that serious consideration which they are entitled to by reason of the magnitude of their interests.

Merits of the Ontario Act.

It is too early to speak definitely and comprehensively of the operation of the Ontario Act. Some excellent features are now evident in practice as they were anticipated in theory. Claims are adjusted expeditiously without waste of time in court procedure or waste of money in litigation fees. Workmen receive their compensation without any contest over the question of fault, thus placing the matter of compensation on the basis of adjustment and insurance rather than of indemnity. The disposition of employers has on the whole been to give the Act a fair chance and to extend to the Board their sympathy and support in its administration. This, with the exercise of good faith and the spirit of give and take, will no

doubt bring about the adjustment of a great many difficulties which are incidental to setting in operation a new scheme.

Defects of Ontario Act.

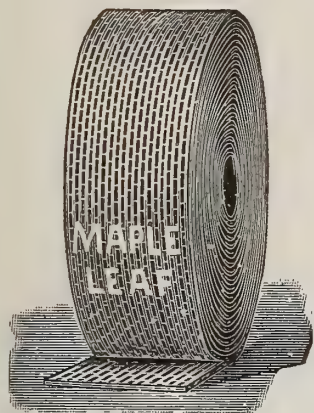
The Act has, however, shown in its initial operation precisely the defects that were anticipated by your Committee and discussed in the last annual report. The vagueness of the provisions of the Act has left many of the most important matters to assume definite form in practice either by ill-considered determination or by pure chance. An instance of this is the method of assessment. As was repeatedly pointed out by your Committee the method laid down in the Act was impossible. It was so found by the Board, and methods and policies largely accidental were adopted in defiance of the provisions of the Act. The manufacturers had been assured by the Government that the necessary changes would be made to place the system on an assessment basis, collecting each year what was required for the year, with such reserves, either on the capitalized or current cost plan, as might be decided upon. The Government having failed to make the promised amendments last year, it was hoped that either the Government or the administering Board would see that the proper practice was worked out and was duly authorized by amendment. Nothing of this kind has been done. So far as there can be said to be any system of rating it is on a premium rate basis. The premiums that have been collected from the different employers are apparently not regarded as assessments but as premiums for carrying their "insurance" for the year. The money that has been collected is set aside in a "reserve" by analogy to the practice of insurance companies. There has apparently been a failure to draw the necessary distinctions between a collective liability compensation system on the one hand and an individual liability system with insurance on the other. But while it is announced that the premiums paid by employers have irretrievably gone into the reserves and are not tentative assessments towards the year's outlay, there is no assurance, and apparently no thought of assuring, that if the money collected in any one group is not sufficient for the year there will not be supplementary assessments to make up the deficiencies. In the result, therefore, the system is a premium system where the employer has paid too much, but an assessment system where he has not paid enough.

Viewed either from the standpoint of "premiums" or of "assessments" the rates exhibit some very plain misconceptions as to the hazards of the different industries. Machine shops are divided arbitrarily into two groups according as they make "heavy" or "light" machinery and rated respectively 1.50 per cent and .80 per cent.; furniture factories are rated at .80 per cent.; organ and piano factories at .50 per cent.; upholstering shops at .50 per cent.; tanneries at .80 per cent.; rolling mills at 2.00 per cent. To the practical manufacturer the disproportion amongst these rates is evident without comment. An earnest effort was made by the Committee to have the rates revised, but so far without success, the Board insisting that the rates must be paid for this year whatever anomalies they display.

The employers are prepared for some experimental errors in the initial stages of the system, but when errors in classification and rating are proven, and when the employers of the class, the only parties vitally interested, agree in suggesting the proper solution, your Committee are of opinion that the

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necessary changes should be made by the Board even at the expense of some little trouble, and that any disposition to make the necessary changes does not augur well for the future administration of the Act. Your Committee are hopeful that the Board appreciate the reasonableness of this position and that certain glaring discriminations will be corrected before the end of the year.

It should also be observed that while the rates show marked inequalities, amounting to injustice if not corrected before the end of the year, they are not unreasonably high considering the schedules of benefits which they are intended to cover; but it is always necessary to remember that the rates represent, or ought to represent, exactly what it costs to compensate for the accidents. If not enough has been collected more will be collected. At the same time the rates are in marked contrast to the rates in other jurisdictions and represent a calculation on the part of the administering Board which your Committee deem entirely justified, that the system can be operated more economically than most of the other systems referred to. The essential feature which makes the difference is the fact that the system is exclusively a state system and that there is no competition with private insurance companies with consequent duplication of overhead expense.

Defects of Administration.

Again as regards the question of current cost, which must not be confused with the question of assessment *vs.* premium rates: The manufacturers were given to understand by the Government that in respect to the industries represented by them the system would be administered on the current cost plan. It was pointed out that the provisions of the Act were equivocal and should be made definite. The reply of the Government was that the provisions were sufficiently definite to provide for the current cost plan. Soon after the Workmen's Compensation Board was appointed an application was made on behalf of the Canadian Manufacturers Association representing that the current cost plan should be adopted. But up to the time of making this report it has been impossible to secure a ruling from the Board as to which method is to be adopted. There is ground, however, for the understanding that the Board feels itself obliged under the provisions of the Act to administer the system on the capitalized instead of the current cost plan. It is currently reported that already \$500,000 of the money collected from the employers has been invested in bonds. If so, the greater part of this money should, in accordance with the proposals of the employers and the understanding with the Government, have remained in the hands of the employers for the carrying on of the industries of the province, with those industries as the security for the compensation payments as they come due.

Expense of Administration.

The Canadian Manufacturers Association was given ample reason by the members of the Government to understand that it was the intention of the Government to pay the whole or a large part of the expense of administering the Act. It was the one point upon which there was general agreement before the Commissioner who drafted the Act. Assurances were given on behalf of the Government that the sum of \$100,000 placed in the estimates last year was placed at that low figure because it was expected that the expense of administration for the fraction of a year would not exceed that amount. There is reason for believing that it has been decided by the Government not to pay any more after the first year except the salaries of the three Commissioners, and no amount was placed in the estimates for this year towards meeting the

cost of administration. It seems preferable to your Committee to state the facts without comment or characterization.

There is another matter which should receive attention in this connection. No assessments are being made upon the industries in schedule 2, that is to say, railway companies, navigation companies, etc. If any part of the cost of administration falls upon manufacturers it will mean that the manufacturers are paying for the administration of the Act for the railway companies and navigation companies. It is not necessary to emphasize the injustice of this, and your Committee suggest that the Annual Meeting might consider what steps should be taken by way of securing a remedy for this and the other conditions to which allusion has been made.

Potential Abuses.

In those phases which were of a contentious nature as between employers and workmen, as, for instance, the "waiting period," the anticipations of your Committee are also being realized. Numerous cases have already arisen where injuries which would ordinarily have laid a man off for only a day or two, or perhaps not laid him off at all, have been "nursed" for the full period of seven days. In some of these cases the compensation has been paid without any apparent consideration of the reports of the employers as to the circumstances. It is not necessary to suggest the seriousness of any looseness of practice in this respect. The provisions of the Act itself are wrong and are an inducement to fraud, but they make vigilance all the more necessary. If improper precedents are laid down at this stage they will result not only in undue expense to employers but in a demoralization of the whole system. Your Committee propose making strong representations that in cases where there is any dispute as to the workman's right to compensation no claim should be settled without an adequate report from the employer, and that where necessary a hearing should be given in which the association representing the group should be given an opportunity to be heard.

Attitude of Canadian Manufacturers Association.

We have mentioned only two or three phases of administrative policy which are in an unsatisfactory condition. There are others equally unsatisfactory, all of which your Committee have in mind and are seeking to have removed as opportunity is offered. Your Committee have determined, notwithstanding the unsatisfactory character of some features of the Act and the difficulties incident thereto, and not only as a matter of duty but with all earnestness to co-operate with the Workmen's Compensation Board in making the system a success. We desire to testify to the ability and earnestness of the Commissioners in undertaking a very great task under difficult conditions. It was most natural that there should be on the part of the Board a disposition to defend the Act from criticism. It was necessary, however, if the system was to be successfully administered that faults and potential faults should be pointed out at the time when the system was in the making and precedents were being set. While the Board were cordial in their acceptance of offers on the part of the Canadian Manufacturers Association to co-operate in working out the problems of administration there is some reason to think that from the standpoint of the Board co-operation was more or less synonymous with submission. This may have been natural enough, but it was also natural that differences of view should arise and be strongly maintained as between the Canadian Manufacturers Association and the Workmen's Compensation Board. Your Committee are hopeful that a working basis has been reached in which the authority of the Board and its disposition to administer the Act in a fair and

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reasonable manner are recognized on the one hand, while on the other, it is recognized that the Canadian Manufacturers Association, as the protagonists of the whole system, and the representatives of the bulk of the industries of the province, are entitled to have their views and representations given due consideration and weight.

Accident Prevention Associations.

Turning from criticism of the administration of the Act, it is a pleasure for your Committee to testify to the hearty support and co-operation of the Board in the matter of the formation of the accident prevention associations. Some twenty-five of these associations are now in various stages of organization. The plans and purposes of these associations are so well understood by manufacturers that it is not necessary to go into particulars. It is sufficient to state that in a number of associations arrangements have already been made with the Board whereby the rules of the association are recognized as binding upon the whole class or sub-class of employers and whereby the outlay of the association for inspection, and in some cases for running expenses, is to be reimbursed by the Board out of the funds of the class or sub-class. Your Committee anticipate a very large field of usefulness for these associations. There is in connection with their work a good deal of the uncertainty that attaches to new and untried projects, but from whatever angle the subject is viewed there seems to be ample promise of a sphere of activity which ought, and we think undoubtedly will, not only command the support but evoke the enthusiasm of the employers of the province and will probably result in the setting up of an economic agency which will be one of the most effective forces of the province.

The chief difficulty in the way of the work of the Associations is the inapt classification of industries in the Act. It was understood that this classification would be thoroughly discussed before it became effective, but the disposition of the Board has been to adhere to it in the form in which it was originally presented to Sir William Meredith as a draft. In many of the groups it has been found impossible to organize accident prevention associations in accordance with the boundaries fixed by the classification and in order to create a homogeneous field of operations for the association it has been necessary to take part of a class or parts of two or three classes. The associations are therefore directly concerned with questions of classification and related questions of rating, and these questions must in most cases be solved before the organization of the association can be proceeded with.

Your Committee have had to deal with important problems in connection with the organization of these associations. Each of the associations will be absolutely autonomous as regards its own sphere of work, but it has been proposed that for purposes of economy in clerical and office arrangements, as well as certain other features of administration a federation of the different associations should be formed.

Up to the present the organization of the Safety Associations has been in charge of the Legal Department of the Canadian Manufacturers' Association. The work has assumed such proportions, however, that the Department was compelled to ask for assistance, and your Committee thought it well to consider at once the question if and to what extent the Safety Associations or the federation of them, should be connected, directly or indirectly, with the Canadian Manufacturers Association. After careful consideration it was decided that it would be advisable that the work should be no longer carried on by the Canadian Manufacturers Association, but that the matter should be handled by a separate organization created for the purpose. The following report of the sub-committee which had been appointed to consider the matter

was adopted and is recommended by your Committee to the Annual Meeting, and to the proposed organization of Safety Associations:

"To the Workmen's Compensation Committee and associated members representing the Safety Associations:

"Gentlemen,—

"Your sub-committee, having given careful consideration to the selection of a suitable man as General Secretary of the Associated Safety Association, have pleasure in recommending the name of H. D. Scully, of the Canadian Home Market Association, for the position, after consultation with the officers of the Canadian Home Market Association in respect to premises and proportion of salary of Mr. Scully which shall be paid by the Associated Safety Associations.

"Your Committee beg further to report that Mr. F. W. Wegenast, our Legal Secretary, in view of his special knowledge of the subject, offered to accept the office of General Secretary of the Safety Associations if the Committee thought it desirable, but in the opinion of your Committee it was deemed advisable to have a special officer for the position, who would be in close touch with the Legal Secretary for advice and assistance."

The Nova Scotia Act.

Soon after the meeting of the Nova Scotia Legislature it was announced that a Workmen's Compensation bill would be introduced for the Province of Nova Scotia along the lines of the Ontario Act. The Central Committee promptly communicated with the Nova Scotia Branch referring to the deficiencies of the Ontario Act, and advising the Branch to take prompt steps to oppose the bill, at all events in anything like the form of the Ontario Act. Subsequently at the request of the Maritime Branch, Mr. Wegenast visited Halifax and remained there for the greater part of the Session of the Legislature. The bill as introduced was practically a verbatim copy of the Ontario Act; even the classification of industries (which had been drawn with reference to the industries of Ontario), being reproduced word for word. Deputations of the manufacturers of the province waited upon the Government, pointing out the objections to the measure and urging that as the Ontario Act was a new, untried experiment, and had been in force for only a few weeks, the bill should be laid over. In case the Government felt obliged to pass the bill it was urged that it should be redrafted. The manufacturers were met by the Government in a fair and cordial manner, and the whole matter thoroughly discussed at length before the Committee of the House. Representatives of the labor organizations participated in the discussion throughout, and it is a pleasure to report that these representatives freely and earnestly expressed their appreciation of the fair and broad-minded manner in which the object was dealt with on behalf of the Canadian Manufacturers Association.

Revision of the Nova Scotia Bill.

It is not possible to enter into the details of the changes made in the bill. The fact that the bill was reduced in size by about twenty sections, and that probably less than one-third of the original bill remained after the revision, would indicate that the changes were extensive. Some of the excesses of the Ontario Act were modified. Thus the limit of the amount of compensation which a workman might draw was reduced from \$1,100 a year to \$660 a year. The bulk of the changes, however, were in the features relating to assessment and administration, in which the provisions of the Act were entirely abandoned and new material provided based

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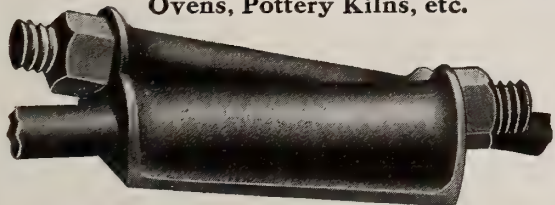
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upon the draft bill which had been presented to the Ontario Commissioner by the Canadian Manufacturers Association.

The bill as finally passed, is a readable and workable document. Some of the anomalies and excesses of the Ontario Act remain, but, on the whole, the Act represents an immeasurable advance upon the Ontario statute, and comes within reasonable distance, in a number of respects, of being a model Act.

British Columbia.

In British Columbia also a Workmen's Compensation Bill was introduced, copied from the Ontario Act. Prompt representations being made as to the deficiencies of the Ontario measure, the bill was laid over until the subject could be more thoroughly investigated. It is anticipated that the matter will come up again at the next session, and your Committee will be prepared to render what assistance they can to the British Columbia Branch in dealing with it.

Manitoba.

A number of conferences have taken place between representatives of the Canadian Manufacturers Association, the Boards of Trade, and the labor organizations, looking to the adoption of a Workmen's Compensation Act, based upon the Ontario Act. It is quite possible that the matter may come up in concrete form at the next session, and your Committee will be prepared to render such assistance as may be in their power.

J. R. SHAW,
Chairman.

G. M. MURRAY,
General Secretary.

F. W. WEGENAST,
Secretary.

Before moving the adoption of the Workmen's Compensation Report, the Chairman, Mr. Shaw, asked Mr. Wegenast, the Legal Secretary, to explain certain changes which had taken place.

Later Developments.

Mr. Wegenast: "Since the report of the committee was written, in fact since it was printed, a number of advices have come from the Workmen's Compensation Board to the effect that in a number of matters where the work of the committee had so far met with negative results, or results positively adverse, the situation is changed and the work which had been undertaken has now proven entirely successful: in one particular, just by way of instance, the efforts of the committee to establish the status of the Safety Associations to contest claims in which a principle was at stake. The Board has announced that they fully recognize the right of the Associations to represent the funds and the understanding now is that, in all questions involving matters of principle, the Association representing the group funds will be heard before any adjustment is made. That is only one instance, but it is not necessary to amplify, and, whether the report as it stands is altered or not, it should be adopted, having in view the change in the situation."

On motion of Mr. John Shaw, seconded by Mr. S. Harris, the Workmen's Compensation Report was adopted.

On motion of Mr. W. K. McNaught, seconded by Mr. John Shaw, it was decided to enunciate the principle that the Ontario Government should defray the administration expenses of the Workmen's Compensation Act.

"MADE-IN-CANADA" CAMPAIGN ENDORSED BY THE C.M.A. CONVENTION

Members Present Supported the Campaign and Advocated Its Continuation

In opening the meeting called to discuss the "Made-in-Canada" movement, the President, Mr. E. G. Henderson, stated that he believed this was the most important campaign ever undertaken by the Canadian Manufacturers Association, and it rested with the individual members to back up that campaign with advertising and every other means in their power.

REPORT OF THE MADE-IN-CANADA COMMITTEE.

THE following report, though prepared by a Committee appointed by the Executive Council of the Association, is submitted not to the Association itself but to those who have subscribed to the Made-in-Canada Campaign Fund. Discussion will be welcomed from any who have contributed or from any who may be prepared to contribute in the event of the campaign being continued.

Historical.

It was at a meeting of the Executive Council held on September 10th last that a campaign in support of the Made-in-Canada principle was first seriously discussed. There had been prepared for consideration by the meeting in question a fairly elaborate programme of suggestions, pointing to the possibility of conducting such a campaign from a variety of angles. It was soon recognized that anything like an ade-

quate discussion of all the suggestions brought forward would be impossible in the limited time at the Council's disposal, and without committing itself in any way upon other avenues of attack the Council approved of a campaign of newspaper advertising, to begin on the first of October and to continue for three months, at a cost of \$25,000.

The Committee whose names are appended to this report were appointed to superintend the campaign and to devise ways and means for raising the necessary amount of money.

Possibly some criticism may attach to the Council for assuming to give instructions in an undertaking for which it did not propose to obligate the Association financially. The reasons it did so, however, were: first, that it firmly believed the campaign would prove beneficial to Canada as a whole; second, that it entertained little doubt but what it would be generally acceptable to the membership, whose individual support could be safely counted upon; and third, that it hardly seemed permissible for the Association to deplete its treasury for work of this particular kind. As to the ability of the Committee to raise the sum of \$25,000 the Council had no misgivings. True, the Association had no authority under its by-laws to levy an assessment on its members, but the Council recognized that the sum stipulated would be more than covered by each member contributing one-half his annual fee. Confident in the expectation that an invitation to give so modest a subscription would be accepted almost unanimously, the Council encouraged your Committee to lose no time in maturing plans and in commencing the campaign.

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Newspaper Campaign.

Through the assistance of Messrs. A. McKim, Limited, whose services were engaged as advertising agents, a campaign was mapped out and started on October 1st to cover practically the whole of Canada.

It was recognized of course from the outset that it would be impossible to use all publications, and the task of selecting a set that would afford the maximum circulation with the minimum of overlapping was one that gave the Committee a good deal of trouble. By dividing the field into classes, however, it was seen that some were much more suitable than others, and by a process of elimination the Committee was finally able to narrow its choice down to 144 publications, embraced in six different classes, as follows:—

Large city dailies	45
Small city dailies	53
Weekly editions of dailies (for rural circulation)	26
Weeklies of general circulation	6
Agricultural papers	10
Literary and illustrated papers	4

In making their selection the Committee were careful not to overlook the desirability of a wide geographical distribution, and the papers embraced in the above schedule, which by the way had a combined circulation of more than 2,250,000, were published in various centres all the way from Sydney, N.S., to Victoria, B.C.

Some of the important classes of publications omitted were trade papers, financial papers, religious papers, small town weeklies, and weeklies using a patent inside. The Committee left the trade papers out of their calculations because they were promised that these would be covered in a campaign to be undertaken by the Canadian Home Market Association. They would have liked to patronize the small town weeklies, but to do so would have meant weakening the campaign in some other direction that really promised better results. The patent inside list was not used because it did not fit in with one of the principles the Committee kept most prominently before them, and that was to gain for the movement the good will and support of every paper employed.

The Advertisements.

The standard type of advertisement, that used in the large city dailies, was three columns wide and nine inches deep. A smaller size, having the same width, but only six inches deep was used in papers of less circulation. The complete series consisted of thirty-two advertisements, of which twenty-six were for general newspaper use, the remainder for agricultural and other special publications. The larger dailies were instructed to run two advertisements a week for a period of 13 weeks; but in the smaller dailies the number of insertions was sometimes reduced to twenty, to enable the Committee to keep within the amount they were authorized to spend. For the same reason, the insertions in weeklies had sometimes to be reduced to ten, or even six.

A uniform style of display was maintained throughout. It was not illustrated, a fact which led to some criticism, but the Committee had in mind that this feature might be introduced later, should the campaign be continued beyond the three months period. An earnest effort was made throughout to prepare copy that would be bright and forceful, and that would present the argument from a variety of standpoints.

Readers.

As this campaign of publicity differed from most campaigns in that it was not for the benefit of an individual, but

for the whole of Canada, the Committee, through their advertising agents, approached all publishers carrying their contracts with a view to having them assist the campaign editorially. The response received was most gratifying, practically every editor pledging his support. In the case of the large city dailies this was given in the form of articles specially prepared by their own reporters. In the case of smaller papers, however, this was seldom practicable, and with a view to giving better effect to their offers of assistance, an editorial writer was engaged to prepare syndicate articles that were distributed over the entire list, with a release date attached to each. These articles were carefully edited by the General Secretary, to ensure their acceptability. It is most gratifying to be able to report that they were widely used by the publishers to whom they were sent, so widely used in fact, that there is room for the opinion that the publicity thereby gained for the movement was of equal, if not greater value than the publicity gained from the advertisements themselves.

Cartoons.

After the campaign had been in progress for a month, the Committee undertook to syndicate a series of cartoons in the same manner as the readers were syndicated. For this work some of the best artists in Canada were engaged, and owing to their versatility the argument was graphically set forth in a variety of ways that could not fail to be impressive. Nearly 100 publishers accepted them regularly, frequently giving them space on the front page, a fact which bears eloquent testimony both to the merit of the cartoons themselves and to the whole-hearted support which the press of Canada were prepared to give the movement. The Committee were naturally delighted to furnish the service, because the cartoons were certain to be seen when reading matter might sometimes be missed, and the cost on the whole was trifling.

Continuing the Campaign.

Meanwhile suggestions began to be received that the campaign should be made continuous. The Committee had come to the same conclusion after realizing its immense possibilities and the unlimited variations in the methods of publicity that might legitimately be employed. Instead, therefore, of issuing to members an early appeal for subscriptions on the basis of half the annual membership fee, which of course, if generally met, would have taken care of the three months campaign only, it was decided with the approval of the Executive Council to defer the appeal until the real merits of the campaign had come to be more generally recognized, and then to prepare for distribution to the membership an attractive booklet that would not only be a report of the work actually done, but a prospectus of a wider and more permanent campaign that might profitably be undertaken, providing the necessary financial support were forthcoming.

Finances.

Such a booklet was in due course produced and distributed to the entire membership in January last, accompanied by a letter inviting subscriptions on a basis that was specifically mentioned, the whole being planned to realize a sum of at least \$150,000.

A month later a follow-up circular was sent to members who had failed to respond, and after that again a large number of members were personally called upon with a view to obtaining support that proved to be very slow in coming in.

The subscriptions received to date as a result of all these efforts total only \$29,433.33, the various provinces contributing in the proportion here shown:

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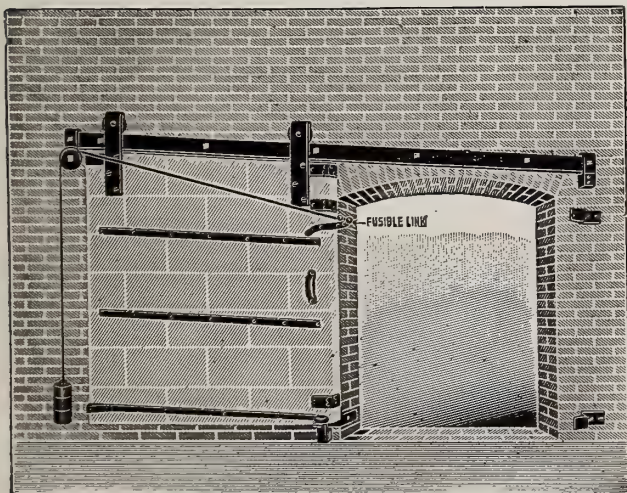
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A further sum of \$650 has been subscribed under conditions which make it impossible for the Committee to call the money up. The actual cash collections to date have been \$24,600.33, and the account has been credited with \$56.95 interest.

The campaign through the medium of the newspapers cost in all \$25,902.17, including the reader and cartoon service. There has also been charged up to the fund the cost of the booklet and sundry items aggregating \$1,068.06. There remains, therefore, at your disposal, subject of course to the collection of the balance of subscriptions, the amount of \$2,520.05, which will have to be very considerably increased before undertaking anything in the way of a renewal of the campaign. Meanwhile the account with the Canadian Manufacturers Association is considerably overdrawn.

Reasons for Lack of Support.

In this connection it may be interesting to note the reasons advanced for failure to support the campaign by those who adopted an attitude either of indifference or of opposition. Indeed, a proper understanding of these reasons would seem to be necessary in arriving at an intelligent decision as to future action.

Dealing first with those who displayed indifference, there were a considerable number who claimed that imports in their line of production were very small, that they suffered no inconvenience from outside competition, and that the campaign, therefore, did not interest them. To these the answer was given that one of the main results to be achieved by the campaign was to increase employment and make it steadier; that if this end were attained the purchasing power of Canada as a whole would be augmented and that in consequence the demand for all classes of goods would be stimulated. In other words the hope was held out to them that indirectly they would benefit almost as much as those who were in a position to benefit directly.

Another class, embracing quite a number of our members, attempted to justify their withholding of support on the ground that their goods were marketed exclusively through the wholesale or jobbing trade, and that as the campaign appeared to be directed towards the education of the consumer, it could not possibly benefit them. Your Committee have to admit that the problem of the jobber is one which presents serious difficulties. One of the things a jobber most values is his ability to control exclusive lines, and any effort to persuade him to surrender such control in the case of imported goods would almost certainly prove unsuccessful because he would know that the lines he surrendered would immediately be taken up by one of his competitors. On the other hand there is no question but what the jobbing trade would be glad to accommodate itself to any change of sentiment on the part of the buying public, and any increased demand from the ultimate consumer for Made-in-Canada goods would quickly be reflected in larger orders to the manufacturer.

Inconsistency on the part of manufacturers themselves was raised as an objection by quite a number whose finished product is some other manufacturer's raw material. No doubt there is a good deal of ground for this sort of criticism, but on the other hand it is only fair to state that the policy that is sometimes described as inconsistent is really dictated by necessity, because of the proven failure of the complainant to supply goods of the quality wanted or in the quantities or at the times required, or at prices that will reasonably compare with the prices at which imported goods can be purchased.

Still another group was comprised of those who claim to approve of a Made-in-Canada campaign but not the kind of

campaign that the Committee was conducting. For example, quite a number stated they would be prepared to subscribe to a campaign directed towards the education of the middleman, particularly the retailer; others again conceived it to be the duty of the Committee to bring pressure to bear in individual cases, in other words to assist them directly in the sale of their goods. It would be impossible, of course, without a very large and expensive organization, to make the campaign all-embracing, or to render assistance in individual cases, though as a matter of fact the influence of our Association has frequently been invoked and frequently been lent towards keeping the business arising out of important contracts in purely Canadian channels.

Perhaps the most potent reason of all for the meagreness of the response to the appeal for funds was the fact that very many of our members felt they really could not afford it. In the majority of cases where this reason was advanced it could probably have been shown to be invalid, because it is always necessary to spend money to get business, and nothing was better calculated to stimulate Canadian business than the bringing about of a change of sentiment that would decrease imports and consequently increase the consumption of domestic products. In some instances, however, the refusal to support the campaign was unquestionably dictated by necessity, even though the campaign itself met with hearty approval.

Other Aspects of the Campaign.

It must not be assumed that the work of the Committee consisted solely in superintending the campaign of newspaper publicity above outlined. Suggestions kept crowding in upon them from every quarter, pointing to other lines of endeavor that might profitably engage their attention. Some of these were easily acted upon and at little expense, while upon others action had to be deferred pending the receipt of authority to exceed the appropriation stipulated.

Interviews were had with a committee of the Retail Merchants' Association, looking to the enlistment of the services of that organization in helping the cause along. Assurances of the most friendly co-operation were received, and a campaign was planned involving, first, the sending of a series of circulars to a select list of 40,000 retailers explaining why it was to their interest to handle domestic in preference to imported goods; second, supplying them with attractive hangers or showcase cards that would be a reminder to their customers of the desirability of patronizing home-made products; and, third, furnishing them with quantities of cards and leaflets for enclosure in parcels to be sent to the homes. There are admittedly wonderful possibilities in a campaign of this kind to be conducted through the medium of the retail trade, but of course it would need to be strongly financed.

A number of interviews were similarly had with Committees representing women's organizations such as the National Council of Women, and the Daughters of the Empire. Women are naturally the buyers of a very large proportion of those things required for the home. The Committee found them deeply interested in the movement and anxious to help, but constantly embarrassed in giving that help by a lack of knowledge as to the range of articles made in Canada, and their inability to verify the origin of many of the things they were daily called upon to purchase. Here again there is opened up a field of useful work for a Committee liberally supplied with funds.

Another suggestion to which considerable thought was given was to utilize the theatres and moving picture shows for the inculcation of the Made-in-Canada idea. The movement being a patriotic one, it was felt that the proprietors of such establishments would gladly give free publicity to pic-

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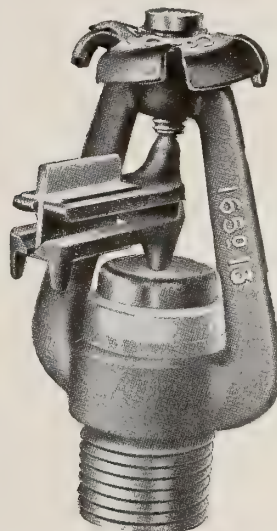
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"Let our Engineers be your eyes."

tures and mottoes, providing, of course, the slides were supplied them without cost. That this form of co-operation could be counted upon was demonstrated by the Canadian Home Market Association, who succeeded without any trouble in having one slide thrown repeatedly upon the screen in some three hundred moving-picture establishments in Ontario. As pointed out in our booklet, by utilizing all the moving-picture theatres in Canada, it would be possible to reach six million people every week in the year with a different form of appeal every week, at a cost of very little more than \$13,000. But here again the Committee found themselves unable to profit by the opportunity through not having the necessary funds.

Still another form of publicity that received consideration was the suggestion to have the Made-in-Canada idea lucidly explained and emphatically presented in a series of lectures. It was felt that organizations such as Boards of Trade, Canadian Clubs and Women's Societies would not only welcome an opportunity to hear a gifted speaker on so patriotic a subject, but would afford the very best kind of audience for the propagation of the idea. Further developments of this form of campaign might provide for periodic talks to factory employees, the sending of one or more professional lecturers on tour with lantern equipment, to speak at school and church entertainments, and possibly a limited measure of support even from the pulpit.

The utilization of certain forms of special advertising such as street cars, bill boards and electric signs was also considered by the Committee, but as before they found their hands tied by the financial restrictions placed upon them. All these forms of publicity could undoubtedly be employed to advantage in furthering the Made-in-Canada idea and at an expense that would bear very lightly on the individual subscriber in comparison with the results to be achieved.

Outside Support Received.

From the very inception of the campaign it was given a large measure of outside support. Made-in-Canada stickers were issued by a number of firms in a great many different designs, and found a wide sale. A number of attractive hangers made their appearance, one gotten out by a group of lithographers proving particularly popular. The Canadian Home Market Association issued a Made-in-Canada button of which large quantities were distributed by manufacturers in one way or another. The Howell Lithographic Company of Hamilton donated a twenty-four sheet poster, which through the kindness of the Poster Advertising Association was displayed on bill-boards from one end of Canada to the other. The Street Car Advertising Company have given the movement a great deal of very valuable publicity by the display of cards, presenting the argument convincingly and in a variety of ways.

Furthermore it is a notable fact that quite a number of our large advertisers, particularly those who conduct what might be called a national campaign, have featured the Made-in-Canada idea in their advertisements. While they no doubt believed that by so doing they were serving their own best interests, it is not to be forgotten that the association of the Made-in-Canada appeal with high-class domestic products gave strength and stability to the whole movement.

Much valuable support was also received from retailers and from departmental stores through the holding of Made-in-Canada displays and Made-in-Canada sales. In some places the retail trade was organized to feature a Made-in-Canada week, with resulting benefits of lasting value. It is to be feared, however, that the holding of such sales has sometimes worked more harm than good, because of a desire to make them the occasion for offering bargains, in medium to

low-priced articles, thus helping to create the impression that nothing but cheap products are made in Canada, and that for articles of superior quality consumers have to depend upon what is imported—an impression which is, of course, far from reflecting the true state of affairs.

Criticisms of the Principle.

Meanwhile it is important not to overlook the fact that in some quarters criticism has been freely offered not only of the campaign itself, but of principle underlying the campaign.

It is claimed, for example, that it is a short-sighted policy for a country like Canada, that has to depend upon export markets for such a large proportion of her agricultural production. Those who adopt this attitude point out that other countries buy our grain because we take in exchange their manufactured goods, and that if we cease to take the latter, they may cease to take the former. In substance this is what certain college professors tell us, who make their living out of a Made-in-Canada University.

Others contend that it is too narrow and too selfish a policy for enlightened Canadians, who realize the debt they owe the Mother Country—that it should be broadened to a "Made-in-the-Empire" policy. While granting that we should all endeavor to buy from within the Empire what we cannot buy in Canada, the Committee desire to point out again that one of the principal objects the campaign was intended to serve was to provide employment for our own workpeople. The care of the needy is a problem which each part of the Empire must solve for itself, and by buying goods from England we are not helping to relieve want at home.

A much more pertinent criticism is that the campaign fails to differentiate between things that are good and things that are bad; anything that can truthfully be said to have been made in Canada is recommended as worthy of support, regardless of whether it offers good value or poor. Herein unquestionably lies one of the real weaknesses of the propaganda. The phrase "Made in Canada" is not copyrightable; anyone is at liberty to use it so long as he uses it truthfully. If, as is alleged, it is sometimes employed by unscrupulous manufacturers to enhance their profits at the expense of purchasers who desire to be loyal to home industry, then it is certain to react upon those manufacturers who use it honorably by bringing suspicion and distrust upon the whole movement.

When the "Made in the U.S.A." movement was started across the line last autumn, *Printer's Ink* invited a large number of business men, in various parts of the United States and in various lines of trade, to express themselves for publication as to the merits or weaknesses of the idea, and it is interesting to note that the majority of the replies received were unfavorable for the very reason as given above. Patriotism, it was pointed out, might lead to a conscious preference being given the home-made article for a time, but if trade were to be permanently influenced in its favor the article must be able to stand comparison in every way with the best obtainable elsewhere.

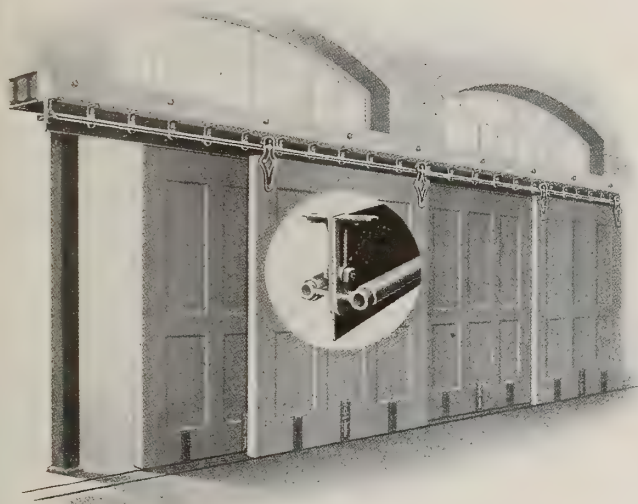
And so with Made-in-Canada. Sentiment will undoubtedly go far in giving it a start, but unless it can be made a hallmark of quality or of value, as well as a certificate of origin, it will speedily lose its potency as a factor in selling.

This very naturally leads up to another point. Assuming that the campaign had the desired result of causing consumers to ask for goods made in Canada, how are those same consumers to know whether the articles offered them by the dealer are made in this country? Package goods are usually recognizable, because they bear the maker's name or brand, but many lines of goods are regularly sold without any such iden-

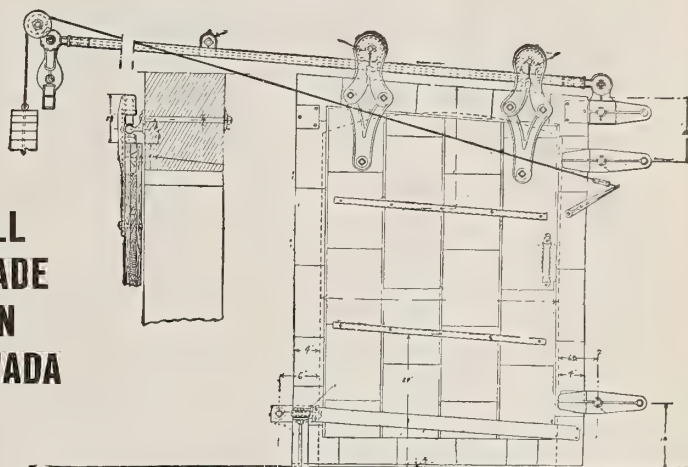
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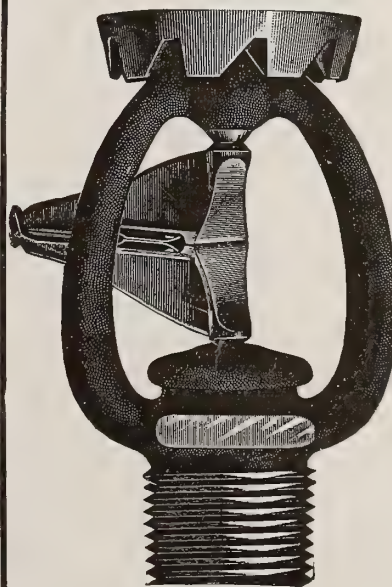
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BEST

Esty : :
Automatic
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Sprinkler :

It will cut your insurance premium in half and pro-
tect you against loss by fire. Write for particulars

tifying marks. The dealer's clerk may say that the article was made in Canada when it was not, or he may say that the class of article enquired for is either not made in Canada at all or else in cheap grades or inferior qualities only. How is the consumer to know? And if he is not satisfied to take the dealer's word for it, what course is open for him other than making the same enquiry of a second dealer, or a third? This, it will be recalled, was one of the difficulties complained of by the Committee of the National Council of Women, who were anxious to help, but who foresaw the impossibility of consistent adherence in the absence of identifying marks.

A Copyrighted Label.

An apparently feasible solution of this problem has been worked out by the General Secretary, and is here offered for your consideration, without either approval or disapproval from the Committee.

Whereas the phrase Made-in-Canada is not copyrightable, a design embodying those words, with perhaps in addition the suggestion of a guarantee, would be copyrightable. Let such a design be originated, simple in its outlines, and adaptable for reproduction on any class of material. Let it be copyrighted, and let the title to the copyright be vested in a committee of broad-minded, public-spirited men and women. Next, let it be known that this design or label would certify, with respect to any article to which it might be attached, first that it was made in Canada, as far as practicable from Canadian material; second, that at the price at which offered for sale it represented good value for the money; and third, that behind it stood the manufacturer's guarantee of material and workmanship, with a promise to make good any deficiency.

Applications for authority to use the label would be entertained by the Committee who, assisted by a small but competent staff, would endeavor to assure themselves that all these conditions would be fully complied with, and that no applicant would be given the use of the label who would in any way bring discredit upon it. For example, in the manufacture of food stuffs the label should carry with it a guarantee of cleanliness and freedom from adulteration as well as the other guarantees mentioned above.

A permit would be issued for a definite period, say for one year, with the understanding that it would be renewed if the holder's record justified it. Each permit might be given a serial number, and the licensee required to use that number with the label as a means of identification. For each permit a fee would be charged based upon the annual turnover or the customary margin of profit in the business, or determined in some other way that would be mutually satisfactory.

The revenue derived from such fees, after allowing for administration expenses, would be used to advertise the label from one end of Canada to the other, urging the consumer to ask for it, first, as a means of assuring himself that he was patronizing home industry, and second, as a guarantee of honest goods at honest prices.

Such a plan, if practicable in the working out, would seem to overcome two principal weaknesses of the campaign as heretofore conducted. Labelled goods would soon be stocked everywhere and the consumer desiring to patronize Made-in-Canada products could obtain same from his regular dealer with the assurance that no deception was being practised. On the other hand, the exercise of care in the issue of permits would ensure increasing popularity and dependability for the Made-in-Canada label, and fully protect it from the disrepute that might otherwise overtake it without some such safeguard.

It has been objected that very few articles can really qualify for the use of the label, because of the necessity so often

devolving upon Canadian manufacturers of using imported materials. This objection is of course theoretical rather than practical, because the Committee would only insist on the use of Canadian materials as far as practicable. This condition would have to be administered with reasonableness, and in the hands of the right Committee it should involve no hardships upon any one concerned.

Another objection may be prompted by the fear that the label will be available only for products of the highest quality; in other words, that an effort will be put forth to make of it a hall mark. Such of course is not the intention except in the restricted sense that the label would always be a hall mark of value. For example, we manufacture in Canada cheap boots, medium-priced boots and high-priced boots. There is a demand for all three, and a useful purpose to be served by each. The purchaser of a pair of cheap boots has just as much right to receive value for his money as the purchaser of high-priced boots, and the presence of the label would give the necessary guarantee in both cases.

Still another objection will very naturally be that some goods are not adaptable to labelling. As against this it has been pointed out that in the case of goods sold in cartons or containers bearing a gummed label, the Made-in-Canada label could at first be affixed separately, and could subsequently be printed along with the cartons or labels themselves. In the case of some fabrics, it could take the form of a neat woven label to be stitched on; in the case of other fabrics it could be rubber-stamped. Articles made of leather and small metal articles could be marked by means of a die. Furniture could carry the label in the form of a neat transfer, while a pattern would accomplish the same purpose for castings.

The Committee would appreciate a full and frank discussion of this proposal as an alternative method of placing the campaign upon a sound and permanent basis. It may be stated that it has been very warmly received in a number of quarters, and that one of our members has offered to donate a prize of \$100, to be awarded for the best label design submitted in open competition.

Additional Suggestions.

As a matter of record other suggestions of merit that have been received are here noted.

Inasmuch as Architects and Consulting Engineers have it in their power to influence a great deal of business by the specifications they draw up, it is believed that a systematic effort to secure their co-operation would be followed by profitable results.

Post Office cancelling stamps are now employed for the purpose of advertising exhibitions and sanitariums. There seems no reason why they should not be similarly employed to help the Made-in-Canada movement, though so far the Department has not shown itself favorable.

The insertion of a clause in all Government and Municipal contracts, specifying, under proper safeguards the use of Canadian material, would give the campaign recognition in official quarters and prove wonderfully helpful.

Some years ago there was formed what was known as the Canadian Industrial League, whose members pledged themselves in their every-day purchases to give the preference to goods made in Canada, other things being equal or nearly equal. It is suggested that this League might be revived, mainly through the aid of Women's Organizations, whose enthusiasm could be depended upon to secure a large enrollment of members and in other ways to make it a success.

It is thought that the banks might allow themselves to be used as a medium for distributing Made-in-Canada literature by instructing their ledger-keepers to enclose in pass-books, as they are balanced from month to month, leaflets of a convenient size to be supplied them free of cost.

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Adjoining Toronto Railway Chambers

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Stationers,

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Makers of Canadian Safety
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133 RICHMOND STREET WEST TORONTO CANADA



A number of excellent suggestions have been received pointing to practical assistance for the retailer in the way of Made-in-Canada window dressing. By the use of posters, pennants, cardboard cut-outs, etc., some enterprising manufacturers have given their retail customers valuable aid, and secured in return a measure of co-operation that has more than compensated them for their trouble.

The exposure of deliberate and persistent offenders against the Made-in-Canada principle is a matter that has often been urged upon the Committee, and which should be kept in view as indicating a course of action that might at some time have to be resorted to in flagrant cases. Generally speaking, however, it would appear that the disposition to neglect the Made-in-Canada principle will always be in inverse ratio to the weakness of public sentiment, and that under a successful campaign these offences will speedily disappear.

All of which is respectfully submitted.

J. H. SHERRARD, <i>Chairman</i> ;	H. H. BIGGERT,
R. S. GOURLAY,	T. P. HOWARD,
T. F. MONEYPENNY,	J. R. SHAW,
J. M. TAYLOR,	C. W. TINLING,
T. H. WARDLEWORTH,	JOHN WESTREN.

Approved the Label.

Mr. S. R. Parsons approved the idea of establishing the Made-in-Canada label, but saw difficulty in applying it to goods in bulk, but he hoped a solution would be discovered. "I think nothing could be better than the employment of a uniform label which would carry with it conviction to buyers," he said, "because people would know that back of that label there was a responsible house for which some concern like the Manufacturers Association would stand as sponsor.

Mr. Bull thought the committee had met with considerable success in collecting money for the campaign. "It was an experiment, in the first place," he pointed out, "and perhaps those who didn't just see the real reason why they should come in will now, in view of this report, feel altogether different."

Use Libraries for Lectures.

Mr. J. P. Murray's suggestion that public library buildings be used for illustrated lectures on factory interiors and processes was favorably received. This plan would enable inhabitants of Canadian towns and villages to become familiar with the work done in their own industrial plants.

"The element of consistency which is referred to in this report is the chief element required to make a Made-in-Canada movement successful," said Mr. Geo. B. Meadows, in reminding the meeting that manufacturers must set the example of patronizing home industry. He told of a certain Canadian manufacturer who showed the proper spirit by saying: "I have been offered very tempting prices on goods from the United States, but in every case I have stated that, I believed that, dollar for dollar, goods equal, if not superior, could be bought in Canada." The order was placed with a Canadian manufacturer, who was so pleased to get it that he gave additional value beyond what had been actually specified. "If we can strain a point with those who will patronize us and give them a little better value than usual," concluded Mr. Meadows, "I think that that is the way we ought to reward those who patronize us."

Good Example to Follow.

"Criticism urged against the Made-in-Canada movement states that it is parochial, local, circumscribed in its area, and has practically little or no value when one comes to see what is being done by other great nations," said Mr. T. H. Wardleworth. "Two years ago, long before the war started, there was an institution in England known as the British Empire League, the object of which expressly was to encourage the purchase in the Empire of Empire-made goods, particularly from Great Britain, if possible. I am in receipt of a French paper regularly week by week, and one of the noticeable features is the argument that French people should buy goods made in France. Earnest appeals are being made by various institutions in the United States for the purchase of American-made goods. Why should we be accused of being insular or parochial in trying to encourage Canadian industries? The manufacturers of Canada have had during the last nine months, whether they have lost it or not I cannot tell, the greatest opportunity of their lives. I have found the greatest possible sympathy on the part of buyers to encourage home-made goods in Canada, and the great cry was, Where can we get home-made goods in Canada? If the manufacturers of Canada do not follow up the work that has been done in the press and in the advertisements which have been issued by this committee, and the lectures and addresses which have been given, they are going to let go by one of the most valuable things that has been presented to them in their history. We ought to keep impressed upon the minds of the people that it is a duty to buy goods made in Canada. The people are quite willing to do it, they are anxious upon principle to do it, but if we do not keep reminding them of this duty it will be forced out of their minds and put on one side." Mr. Wardleworth concluded with an appeal for financial support for the campaign.

On motion of Mr. J. H. Sherrard, seconded by Mr. Wardleworth, the report of the "Made-in-Canada" Committee was adopted.

Decided to Continue Campaign.

President Henderson then asked for an expression of opinion as to whether the campaign should be continued, and, if an affirmative decision were made, what policy should be pursued.

Mr. Henry Cockshutt: "I believe the campaign that has been carried on by the Executive has been worthy of a great many complimentary words. I don't know that I can express it more strongly than that. They have done much in the upbuilding of Canadian manufactures. I am strongly in favor of carrying on this proposition, but I am not in favor of a few manufacturers carrying the whole burden upon their backs. I don't know that I can say that our company has been one of the largest subscribers, but we have been conscientious in the matter, and have stood by it from its initiation, and I believe the results have worked good for every member of the Association. To us it means nothing, because we stand upon our own reputation and have to do business in our own manner the same as other competitors in our line of business, but it is up to the men that supply the general merchants of this country to support this movement. If we give fair value for our money, Canadian goods to-day are as good or better than one can find in almost any country in the world. We have made our reputation as men and as manufacturers, and should live up to it. If you want to carry on the campaign, it is up to you, but, as a whole, unselfishly, to subscribe from \$25 to \$1,000, and to do it now, and we will have

WHEN GEORGE II WAS KING



Before the inauguration of the British Museum in 1753.

Before the fall of Quebec in 1759.

Before the Steam Engine was developed in 1774.

Before the Declaration of American Independence in 1776.

And long before the "Times" was first published in 1788, the firm of Brandram Brothers & Company was manufacturing its products in England.

Their development of the Brandram process of corroding White Lead, which resulted in the standard Lead of the world, known as

BRANDRAM'S B.B. GENUINE WHITE LEAD



marks the greatest single improvement in the Paint Industry in the past two centuries.

The principle of this Process has survived all changes since its first manufacture, and this principle is applied in its perfection in Canada at the splendidly equipped corroding plant of

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some results to show you even in this time of financial stringency. I will move that the campaign be continued and the present committee be continued in office."

On the motion being seconded by Mr. J. P. Murray, the President put the same, which, on a vote having been taken, was declared carried.

Discussion went on after the vote was taken.

"Looking at the contribution that has been made by this large Association and by the manufacturers of Canada, we ought to be ashamed of ourselves," said Mr. Sadler. "It is an insignificant amount when one takes into account the amount of business they do and the amount of money they have to-day. I think unless we largely increase this contribution, people will think the manufacturers are a pretty poor crowd."

Mr. George Henderson, while sympathizing with the campaign, thought that its resumption should be deferred for a time.

Opposed to the Campaign.

Mr. Don. M. Campbell stated that he was not at all in sympathy with the manner in which the campaign had been conducted. "I think we are commencing at the wrong end," he said. "In our schools is the place where we ought to train the children. We ought to take a lead from the Germans' book and train them in the school—train them from the time they are five years old, when they go to the kindergarten—to believe in nothing else but Made-in-Canada goods. We ought to importune our Education Department or Board of Education for each Province to make that part and parcel of the curriculum of their schools—that they should be put into even the Sunday schools along with the Shorter Catechism and the Ten Commandments. They do that in Germany; they are taught from the first day they go to school to believe in buying everything that is made in Germany. We can do it equally well here, and we can do it to far greater effect, because we can raise our children here to think there is nothing else but Canada and goods made in Canada."

"We should endeavor to make our own people feel that what we produce is the best that can be produced, and put our name to it and stand by it, then we will get the business," said Mr. Caldwell. "I believe if Canadians got that spirit, and we were ourselves filled with it, our wives, our daughters and sons would naturally say, 'When I want anything good I want Canadian stuff.' Then our propaganda will have some effect, and we will all catch the spirit, and Canada will get her share of the business that we feel is due to us. Only by doing these things may we expect the co-operation of those who are purchasing goods."

Hon. Mr. Davis pointed out that those who support the campaign to buy Canadian goods are doing their duty as well as those who are on active military service. "The world is moving on, people must eat, they must have incomes, they must have work," he remarked, "and it was conceived by this organization that two causes united to make the time appropriate to advocate the Made-in-Canada propaganda. One was that the German goods which have been coming into this country in large quantities for a long time were cut off. The second was that we want to keep our men employed."

In answer to President Henderson's inquiry, the meeting expressed its opinion that it was advisable to have a distinctive design for "Made-in-Canada."

NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated for manufacturing purposes:

Englehart Flexible Spout Holder Co., Ltd.,	
Winnipeg, Man.....	\$ 35,000
The Banff Talc Co., Ltd., Banff, Alta.....	20,000
Whitby Brick & Clay Products Co., Ltd., Whitby,	
Ont	250,000
The Luitwieler Pumping Engine Co. of Can.,	
Ltd., London, Ont.....	200,000
National Graphite, Ltd., Toronto, Ont.....	60,000
The Faced Brick & Machinery Co., Ltd., Toronto,	
Ont	100,000
Acason Motor Truck Co., Ltd., Walkerville, Ont.	40,000
Ontario Ammunition Co., Ltd., Toronto, Ont....	500,000
Automobile Signal System Co., Ltd, Toronto, Ont.	100,000
The Cobourg Steel Co., Ltd., Toronto, Ont.....	40,000
Cluff Ammunition Co., Ltd., Toronto, Ont.....	100,000
The F. S. Newman Co., Ltd., Winnipeg, Man....	100,000
Metcalf Candy Co., Ltd., Berlin, Ont.....	50,000
The Canadian Laundry Machinery Co., Ltd.,	
Toronto, Ont.....	150,000
Swiss Embroidery Works, Ltd., Montreal, Que..	40,000
The MacLaren Baking Powder Co., Ltd.,	
Toronto, Ont.....	60,000
Spartan Machine Co., Ltd., Montreal, Que.....	50,000
Ætna Chemical Co. of Can., Ltd., Montreal, Que.	1,800,000
Tupper Fire Escape Co., Ltd., Sherbrooke, Que..	100,000

"MADE-IN-CANADA."

"Made-in-Canada" is securing a more permanent base as the movement goes on. The new Berry Brothers' package bears the slogan directly across the centre of the label. Mr. Robert Jones, the company's factory manager at Walkerville, assures us that every Berry label now bears the words "Made-in-Canada."

UNLICENSED FIRE INSURANCE.

The amount of unlicensed fire insurance in Canada as reported to the Insurance Department in 1914 was \$211,306,700. This unlicensed insurance was distributed as follows:—Lloyds, \$59,416,142; reciprocal underwriters, \$20,611,378; mutuals, \$105,123,749; stock companies, \$26,155,432.

CANADA AND SWITZERLAND.

Certain unfounded rumors having led a part of the Canadian public to erroneously believe that Switzerland was completely isolated in the centre of Europe between four powerful belligerent nations and, since the entry of Italy in the war, had been shut off from any outlet on the sea, and was consequently prevented from exchanging products with Canada, Mr. Henri Martin, Consul-General of Switzerland for the Dominion, has just received from the Swiss Political Department in Berne the following cable:

"There is in Switzerland absolutely no interruption of traffic with foreign countries. All said traffic goes through French ports direct or via Great Britain. Route through Rotterdam could also be used, but sailing opportunities are scarcer from Holland."

The Consul-General states also that, according to a recent agreement with the Swiss National Bank and the Bank of Montreal, all Canadian payments intended for Switzerland can be made in Canada through the channel of all offices of the Bank of Montreal in the Dominion.

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There is but one absolutely safe method of wiring. Instal a **CONDUIT SYSTEM**, it will eliminate all risk of Fire.

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The NEPONSET Built-up roof is being used on factories all over Canada. It is a Canadian-Made Roofing of the same quality as

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In addition to the NEPONSET Roofings we also make felt paper and various other kinds of paper and paper board products, especially, water-proof paper such as case linings and building papers.



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BIRD & SON, Dept. H, Hamilton, Ont.
Please send facts about your roofing for
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Specify kind of building.
Quote on paper as per sample attached and
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THE EXPORT ASSOCIATION OF CANADA

The Objects of this New Organization Explained to the Annual Convention of the Canadian Manufacturers Association

MANUFACTURERS whose attention was arrested by the announcements of the formation of the Export Association of Canada, which appeared recently in the press, were given further details by the managers, Mr. F. C. Armstrong and Mr. R. J. Younge, formerly General Secretary of the C.M.A., at the Annual Convention.

In outlining the purpose of the Association, Mr. Armstrong said:—

"The first objective of our Association in developing the market for manufactured goods will be within the British Empire. The second objective will be Russia, and for the period of reconstruction, Belgium and France, where we will find important markets for a wide range of manufactured articles. After the reconstruction period is over, those markets will cease to be of value to us. We then have to turn to the neutral markets which will be open, the most important of which are South America at the present time and China in the future. South America has been passing through a period of financial depression, which so far as Argentina is concerned, is now about to terminate. With the new purchasing power which its exports of meats and wheat will bring, I think we may confidently expect to find South America the battle ground on which German industry, endeavoring to re-establish itself after the war, will encounter the United States. The latter is turning its attention very strongly in the direction of South America. Within the last three weeks, there has been a most important meeting in Washington between financial representatives of the South American Republics and the most important financiers and manufacturers of the United States under the direct patronage of the President and members of the Cabinet of the United States, and full discussions have taken place and plans are under way to provide the machinery for financing South American undertakings. It was pointed out by the head of the City National Bank that the United States would have some three billions of dollars to lend and that a large portion of this money would be available for the development of South America. Therefore, the United States in that market will have the advantage over any possible Canadian competition. The second problem dealt with was the question of transportation, and there it was indicated by the President himself that, if private enterprise was not prepared to embark in the business of providing adequate shipping to carry American goods to South America, he would introduce a shipping bill and the Government of the United States would take the matter in hand themselves. This was supplemented by the representative of Argentina and the other representatives that the whole of the South American Republics should join in an organization to provide adequate shipping facilities. Consequently, the United States is directing its attention very strongly towards South America as a neutral market in which we will have no preference, a market in which it will be impossible for us to finance undertakings. We should conserve our energies and use them in directions from which we are more certain to obtain results."

Mr. Armstrong advanced the opinion that, after the war, the nations would remain grouped for trade purposes in the present arrangement: the Allies, the Teutonic nations, and the neutrals, headed by the United States. The export trade of Canada should be adapted to meet this situation, particularly if it carried with it preferential tariff arrangements. Organi-

zation and enterprise were needed to secure a place for Canada among the exporting nations.

What the Association Will Do.

"When I commenced to go into the question of the organization of this Association," said Mr. Armstrong, "I found that an organization which did not embrace the large manufacturers as well as the smaller manufacturers could not be effective, but we were met by the fact that the large manufacturers, to a considerable extent, had their own organizations for doing business abroad and it was not easy for them to see just in what way a general association of this kind could help them. We were able to point out that such an organization as we proposed could be of important assistance in preparing a general strategical field, within which they could follow their own objectives. The second function of our organization is to act as commission agents for the smaller manufacturers, the scope of its operations would not permit of their going to the expense of providing independent representation abroad. One of the most important manufacturers with whom I personally discussed this matter at the beginning, who had made an important entry into the Russian field, was disposed to take the view that his firm had blazed the pathway in foreign trade which the smaller manufacturers could follow for themselves, but he could see no benefit which his firm could derive directly or indirectly from such an Association. Within the last two days this gentleman has discussed with us very important directions in which such an association as this can help his concern, notably in the matter of arranging transportation, which as an individual firm they have found it impossible to arrange satisfactorily—to get the ships provided to carry the goods which they are manufacturing for the Russian market—and he is extremely anxious that this organization should be formed on a broad and effective basis so as to be able to help his particular company. It is simply a proof of the old saying that the bundle is always stronger than the biggest stick. We find ourselves in the position that big manufacturers have come forward and are prepared very generously to support this organization. I think that we can easily look to the group of ten or fifteen of the largest companies for financial support, amounting to probably a third of the money we require to carry the organization on successfully, and it will be for the rest of the manufacturers who will derive a direct benefit from the organization, in the matter of its acting as commission agents for the sale of goods and making arrangements for sales throughout the world, to make up the balance."

Prices, Delivery and Quality.

Mr. Armstrong emphasized the importance of fair prices, quick delivery and good values in building up and maintaining export trade.

"With regard to the matter of prices," he said, "for the moment they are all high. It is a question rather of getting the goods transported than of buying them cheap. Presently, however, that condition will readjust itself and there will be a demand at competitive prices. As regards our most formidable competitor, the United States, we are not unlikely to find ourselves in the position of having the benefit of preferential

(Continued on page 378.)

ANNUAL MEETING, MARITIME BRANCH, C.M.A.

During the first year of its existence the Maritime Branch of the Canadian Manufacturers Association has shown that an organization has been perfected which will deal with matters affecting manufacturers in Nova Scotia, New Brunswick and Prince Edward Island promptly and efficiently.

The first Annual Meeting of the Branch was held in Amherst, N.S., on May 27th, 1915. The Chairman, Mr. George T. Douglas, reported briefly upon the organization of the Branch meetings dealing with efforts which had been made along the lines of securing larger markets and of encouraging the purchase of home-made goods by Canadian consumers. He recalled the progress of the Workmen's Compensation Bill in the Province of Nova Scotia from its initial stages until it had finally become law. The interests of manufacturers had been safeguarded without sacrificing those of the workmen.

The Committee on By-laws, consisting of Messrs. A. G. Robb, G. T. Douglas and W. L. Baker, submitted By-laws governing the Maritime Branch, which were adopted. Mr. George Henderson was nominated for the office of Second Vice-President in the parent Association for the coming year. The financial report showed a substantial balance in the treasury.

The following officers were elected:

CHAIRMAN,

Archibald McCall, New Glasgow, N.S.

VICE-CHAIRMEN,

S. E. Elkin, St. John, N.B.

George Henderson, Halifax, N.S.

J. T. Cummings, New Glasgow, N.S.

EXECUTIVE.

Bruce Stewart, Charlotte-town.	F. A. Fisher, Sackville, N.B.
C. M. Crockett, New Glasgow, N.S.	W. C. Hunter, Moncton, N.B.
R. H. McKay, New Glasgow, N.S.	H. S. Crowell, Yarmouth, N.S.
J. P. McNaughton, Sydney, N.S.	Angus McLean, Bathurst, N.B.
L. W. Simms, St. John, N.B.	J. A. Reid, Fredericton, N.B.
Clifford McAvity, St. John, N.B.	C. S. Sutherland, Amherst, N.S.
C. C. Starr, Halifax, N.S.	W. L. Baker, Amherst, N.S.
George McKenzie, Halifax, N.S.	J. A. McDonald, Amherst, N.S.
	George T. Douglas, Amherst, N.S.

REPRESENTATIVES TO THE DOMINION COUNCIL.

Archibald McCall, New Glasgow, N.S.
George Henderson, Halifax, N.S.
S. E. Elkin, St. John, N.B.

SECRETARY,

(Recommended by Branch Executive)
A. G. Robb.

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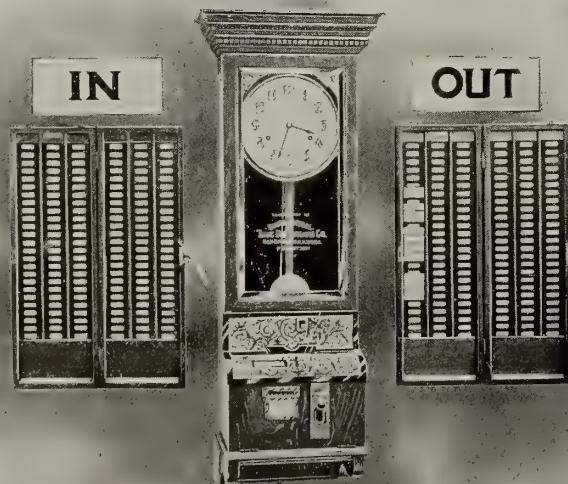
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THE EXPORT ASSOCIATION OF CANADA.

(Continued from page 374.)

tariffs. It is also, I think, within our reach to have the benefit of better transportation than will be possible for the United States for some time to come. The second question, transportation, is at the moment one of the greatest importance. Those who have on hand foreign orders will know the impossibility of getting ships to carry the goods to Australia, to New Zealand, to South Africa or even across the Atlantic. That is a condition which will no doubt presently improve. It will be one of the first duties of our organization through its London office to see that Canadian industrial interests get a fair share of ships. It is just for such a purpose that a central organization is necessary and can be helpful to the larger concerns. I have already referred to the steps which the United States is taking in the direction of securing better transportation for her manufactures to South America and the whole problem of overseas transportation is going to be one of most vital importance in connection with any programme of trade expansion and one in which we should, if we take full advantage of our position, reap the greatest benefit from being a member of the British Empire which owns half the shipping tonnage in the world.

The Necessity of Permanence.

"In the foreign market it is absolutely fatal for a concern which expects to do permanent trade not to make regular deliveries, because the man at the other end has been shaping his arrangements for months depending on delivery of the goods at a certain time, and it is impossible for him to replace them in case the original firm fails in their undertaking to supply them at a certain date. Therefore, it is necessary in foreign trade to have a policy of holding a certain part of the industrial output regularly for the foreign markets you are supplying.

Quality is Essential.

"Finally, there is the question of quality of the goods you will manufacture, which is about the most important matter of all, and one which is entirely within your own control. I hope the time will come when the stamp of this Association on a bale of goods will be taken anywhere in the world in the markets where we carry on our operations as a guarantee of quality and fair and honest business dealing. To build that prosperity up on a sound basis we must broaden the area within which our goods are sold, and it must be our duty to see that the name 'Canadian' on those goods is a guarantee of best quality and fair and honest business dealing."

The Organization of the Association.

Mr. R. J. Younge, in outlining the functions of the office which the Export Association intended to establish in London, England, said that its connection with the British Government would provide introductions to buyers in Russia, Belgium, France and Italy.

"I can see great possibilities in this organization if we only have the united co-operation of the manufacturers in this country," said Mr. Younge, "and if the manufacturers of Canada will realize that the conditions that existed a year ago are entirely changed, that there is to-day an open door in the world's trade that did not exist before, then I think they will all appreciate the necessity of organizing to get ready to take care of that big business.

Co-operating with Government.

"The Export Association of Canada will not go abroad without the sympathetic co-operation of the Dominion Govern-

ment, which is promised, without the sympathetic co-operation of our large railway companies, without the sympathetic co-operation of the bankers of this country but with the co-operation of the manufacturers themselves. We do not need to confine ourselves to manufactured products. We have at the present moment some of the largest railway contractors in the world in Canada who are well equipped to build railways in Russia. Why should we not extend the operations of this Association to include Canadian enterprise of all kinds, filling the needs of the world during the war and in the period of reconstruction and in the permanent channels of trade which will be established after that time?"

In dealing with the question of finances, Mr. Younge said:—

"This Association will not be a money-making institution. You will appreciate the fact that, if we approach through international channels the Governments of the various European countries for big orders, we can do that only by being a strong national organization, which is not designed to pay dividends to shareholders, but is organized to get business for Canada. Consequently, the provisional directors have seen fit to suggest that we establish ourselves as a limited liability company with a capital of \$500,000, that we issue immediately \$100,000 of that capital, and that we undertake in our announcement to repay the manufacturers who place that money at the disposal of this Association—to repay to them the amount of their subscriptions as we are able to do so in accordance with the profits of the company. I think, without making any promises, that we might reasonably expect to repay the manufacturers their subscriptions over a period of ten years, say ten per cent. per annum."

How Business is Sought.

Mr. Younge emphasized the point that the Association is not organized to get business for any one particular firm, but to get business for Canadian factories and to have orders filled in such factories that produce goods of a standard certain to reflect credit on Canada.

In reply to a question regarding banking arrangements and payment for goods, Mr. Younge said:—

"There will be a class of business that will be so big that contractors in Canada who accept orders for delivery in Europe will have to make special arrangements for payment on those orders. On business of the smaller manufacturers we anticipate no difficulty whatever in settling with the manufacturer at the Atlantic seaboard or when the goods leave his factory.

"As far as your foreign connections are concerned, it does not follow that if you associate yourselves with the Export Association of Canada that you must cancel your arrangements now existing abroad. We want to help on those arrangements, we want if possible to give help to the foreign agent in getting orders, provided the agent is satisfactory, but if he is not satisfactory we would step in and make arrangements."

The Export Association of Canada is quite distinct from the Canadian Manufacturers Association, but the two organizations will co-operate as much as possible.

The Provisional Directors who were selected to get the Export Association of Canada going without any special necessity that they should be permanent directors, were Mr. J. H. Sherrard, President of the Canadian Manufacturers Association; Mr. J. H. A. Acer, Laurentide Co., Ltd., Montreal; Mr. Geo. F. Benson, Edwardsburg Starch Co., Ltd., Montreal; Mr. C. N. Candee, Gutta Percha & Rubber Co., Ltd., Toronto; Mr. G. H. Duggan, Dominion Bridge Co., Ltd., Montreal; Mr. H. L. Frost, The Frost Wire Fence Co., Ltd., Hamilton; Mr. C. B. Gordon, Dominion Textile Co., Ltd.; Mr. R. H. McMaster, Steel Co. of Canada, Ltd., Montreal; Mr. W. W. Near, Page Hersey Iron Tube & Lead Co., Ltd., Toronto; and Mr. A. W. Wheatley, Canadian Locomotive Co., Ltd., Montreal.

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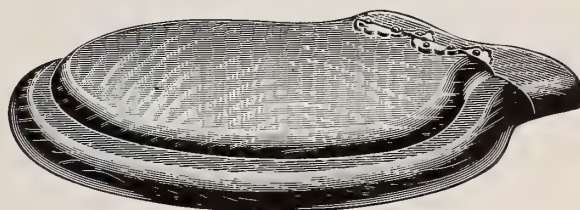
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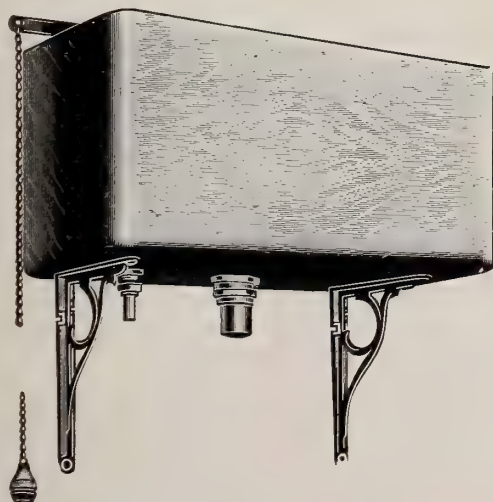


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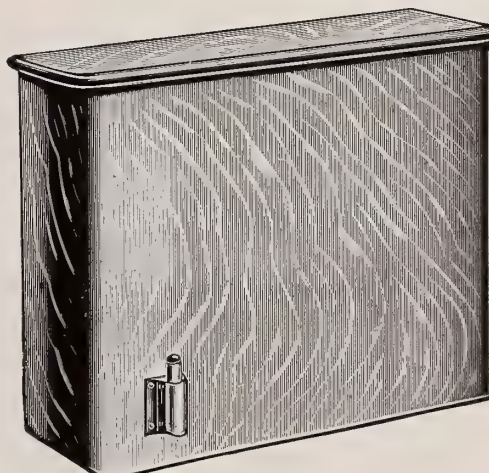


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AGRICULTURAL PROBLEMS OF CANADA

(Continued from page 314.)

whole past of this country had been built up upon the wheat crops of the West and as though our whole future were dependent upon it. If the war had not come on, it is very doubtful what would be the financial condition of Canada to-day. For the period of some three or four years the average wheat price in Liverpool, and therefore in Winnipeg, had been gradually going down, and at the same time the cost of production had been coming up until just the year before the outbreak of the war those two lines met and it is a question whether the two wheat crops of 1912 and 1913 netted Canada as a whole anything more than farm laborers' wages for those who produced the crops. We have figures which have been very carefully compiled and which show that it costs in the West about \$12 to \$12.50 an acre to produce wheat. The price had come down until it got down to somewhere between 60 and 67 cents and the average production of the West was about 20 bushels to the acre. The only people that were making any money out of wheat growing in the West were those who by careful cultivation and use of the best seed were producing above the average. What was happening to those who were producing below the average you can very well imagine. Now, we are in a period, for a short time at least, of high prices for wheat and just as the end of the war approaches, or just as the Dardanelles begin to show signs of being opened up, down gradually will come the price of wheat and no one is able to foretell as to whether the crop we are getting this year will bring over or under a dollar a bushel. This country will never achieve greatness in its development if it is going to place reliance only upon its wheat crop. We have to turn our attention to something else to supplement wheat or take its place.

The Production of Meat.

I have here a brief table which we used in connection with our campaign last winter. It condenses the meat situation of the world, that is, the live stock situation of the world, as perhaps no other table possibly could do. It is a comparison between the increase in population from 1900 to 1910 along with the change in the number of cattle in the same countries.

France had an increase of population of two per cent., live cattle two per cent.

Germany, an increase in population of sixteen per cent., cattle four per cent.

The United Kingdom, an increase in population of ten per cent., cattle two per cent.

European Russia, an increase in population of fourteen per cent., decrease in cattle twelve per cent.

Canada, an increase in population of 34 per cent., increase in cattle 17 per cent. Our people were increasing 34 per cent. and our cattle only 17 per cent. and yet some of us were wondering why the price of roast beef had been going up.

Argentina, the hope of the European countries, forty per cent. increase in population, six per cent. decrease in cattle.

Australia, the only country in the whole list which shows an increase of cattle more than that of population, increase of population eighteen per cent., cattle forty per cent.

New Zealand, increase in population 30 per cent., and cattle sixteen.

The United States—this figure is worthy of note because we are so directly influenced by it—24 per cent. increase in people, and 30 per cent. decrease in cattle in that same period.

Looking at it from a world standpoint we were, before the war, coming face to face with a great shortage in meat. Now, what does that mean? It means two things so far as this country is concerned, that we were losing the great opportunity in connection with our agriculture. We were bending all our energies, straining all of our resources, putting out all of our money to grow and market the crop of wheat at a doubtful advantage and neglecting the development of the great live stock industry, the meat producing industry which was becoming short the world over, for which there would be coming an increase in demand and which is so absolutely



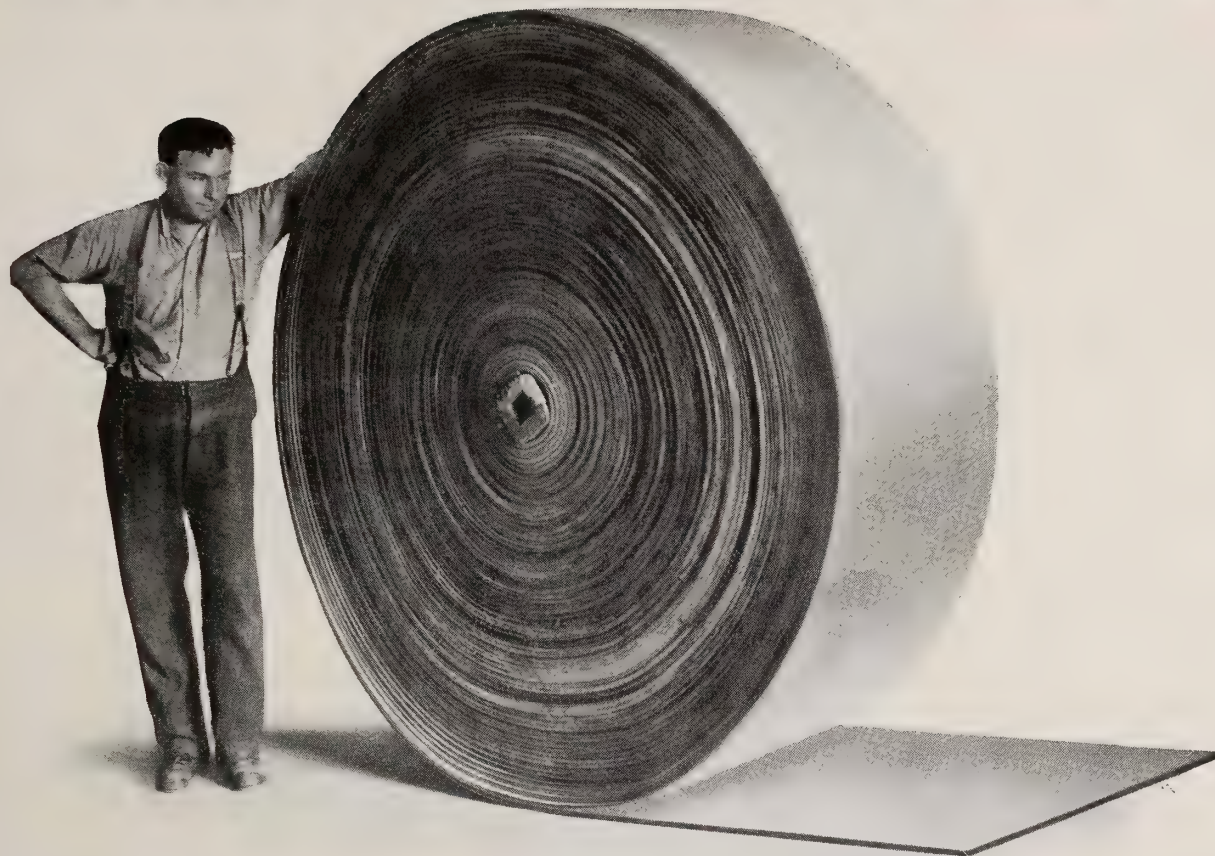
Manufacturers at the C.M.A. Convention Patronized
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necessary for the development of mixed or general farming, and upon which alone a country can become great agriculturally.

The Need for Organization.

The back to the land question, the future location of tens and perhaps hundreds of thousands of immigrants who will come here from Europe, are great problems; yet Canada has no organization to-day outside of special organizations like this for the consideration of these great national questions.

We ought to have some national organization that could consider these great national questions because, unless we get down to the clear and careful consideration of them and work them out, this country is going to fall behind and our big development depends absolutely upon our getting down to the foundations of things, upon taking these questions right back to the very roots and finding out whether our agriculture ought to be developed, or our manufacturing along certain lines, or our banking system, or whether we ought to have more railways. How is it we have not in Canada to-day some nation-wide organization that could take up these questions and not have to be calling upon the Government for commission after commission to consider them?



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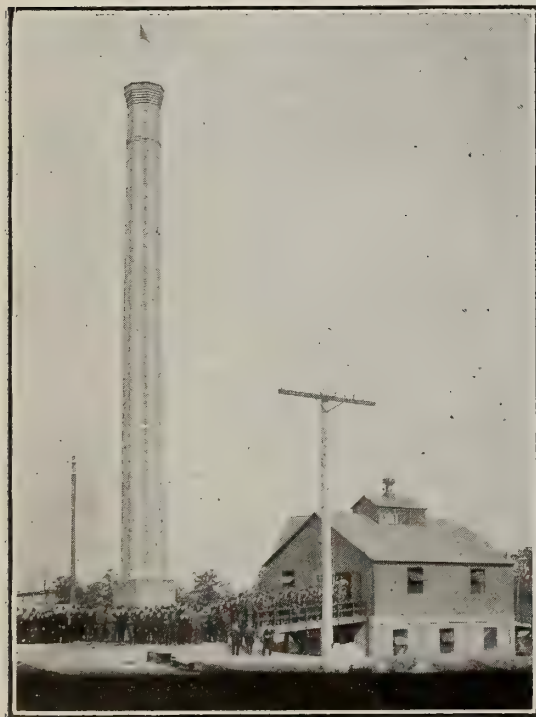
Summary Read by Mr. G. M. Murray, General Secretary, C.M.A., at the Annual Convention.

IN Ontario, through our representatives in the "Ontario Association for the Promotion of Technical Education," we have maintained an active interest in Technical Education, and, by placing our offices at their disposal for meetings, your secretary has been kept well informed of its work. This Association has also on its council representatives of the Boards of Education, Boards of Trade, Trades and Labour Council, Women's Councils and Institutes, Architects' Association, Clay Workers' Association, Arts, Crafts, Home Industries, etc. Public meetings were held in Hamilton, Pembroke, Windsor, St. Mary's, and Ottawa. Addresses were also given to organizations of teachers, parents, and others in Toronto and

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Ottawa. A Branch of the Association has been formed in St. Mary's, with thirty members, and other places are moving in the same direction.

Technical Education Magazine.

A monthly magazine entitled "Training" is the organ of the Ontario Association, and a company is now being formed to take over the publication interests, and to broaden work and make it more aggressive. The magazine circulates throughout the whole Dominion, and the proposed company will operate in all the Provinces. It is hoped that the result may be a binding together in all sections of Canada in a Dominion-wide effort to make Technical Education a national proposition.

The City of Toronto will open its big new Central Technical School the first of September. It is the finest school of its kind on the continent. In Ontario there are now thirty-four centres where Technical Education is taught.

British Columbia sent to Sir Clifford Sifton a Memorial signed by representatives of the C.M.A. and other organizations, backing up the application made by the Ontario Association at the annual meeting of the Commission, in which it was suggested that the Commission appropriate \$5,000 yearly to the organization and support of Provincial Associations for the Promotion of Technical Education, similar to that in Ontario.

Nova Scotia is pushing the work of the Technical College

(Continued on page 384.)

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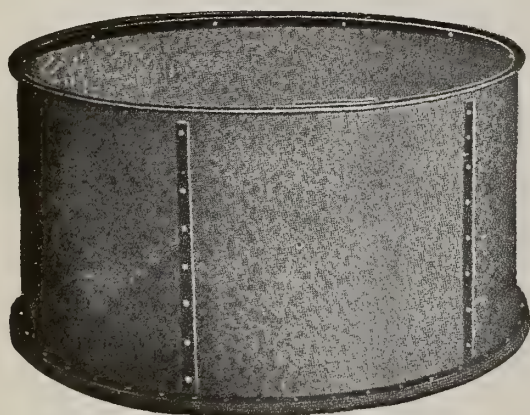
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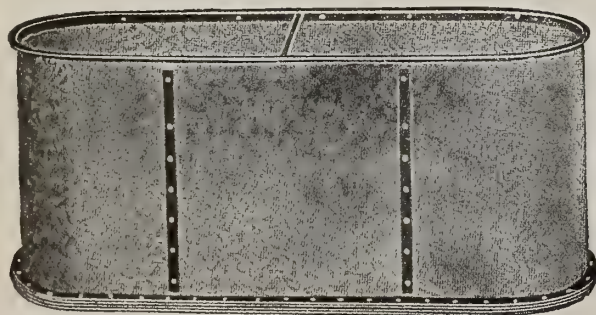
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This is our most popular tank and is in great demand by contractors and builders. It is made of No. 20 gauge galvanized iron and is reinforced with heavy 1/4 inch iron strips, making it exceptionally strong and rigid.



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This round end tank is preferred by some as it is more adaptable for many purposes. Same construction and material as No. 51 above.

We also manufacture Plain Galvanized Iron, Corrugated Iron, Metal Sidings, Ventilators, Sky Lights, etc. Get our special literature on any of these products.

Sarnia Metal Products Co.
Limited
Sarnia, Ontario

PROGRESS OF TECHNICAL EDUCATION.

(Continued from page 382.)

and also the Industrial Classes throughout the Province. While attendance has been somewhat reduced, new Engineering Courses have been opened and were well attended, scholarships being given by several leading citizens.

The Quebec Meeting.

Quebec held a meeting of representative men interested in Technical Education in May, 1914, which was addressed by Mr. Thomas Bengough, and a committee was appointed to take steps toward the organization of a Provincial Association. The temporary absence of some of the leaders who were on the Committee postponed, and then the war prevented, the calling of the larger meeting. Interest in the subject is still strong, however, and as soon as normal conditions prevail an influential Provincial Association will be formed in that Province.

The Western Provinces are well forward in their work and are pushing it as aggressively as circumstances permit. The two splendid Technical High Schools in Winnipeg are doing fine work. The Alberta Government has appointed Dr. Miller as Director of Technical Education for the Province, and new and liberal regulations have been promulgated. Calgary is establishing an Institute of Technology and Art. Saskatchewan has a Technical Education Association for that Province, and Memorials are being circulated asking the Commission of Conservation to assist in this work.

All Provinces Co-operating.

Thus all the Canadian Provinces are moving along the right lines. The stimulus of a financial grant from the Commission of Conservation, and the practical direction of such an influential organization, which has the confidence of the Canadian Public, would mean a great deal to the cause of Technical Education throughout the Dominion pending the formulation by the Dominion Government of a permanent and liberal policy of Federal grants to Technical Education, similar to those granted to Agriculture by the Agricultural Instruction Bill.

This association through its representatives should urge upon the Dominion Government the great importance of this work at this critical period of our development. To develop manufacturing successfully we must have properly trained people to carry on the work.



Manufacturers at R.C.Y.C. during Toronto Convention



Hull Iron & Steel Foundries, Ltd.

HEAD OFFICE AND WORKS - HULL, QUEBEC

Manufacturers of Steel Castings

Chrome, Manganese and Nickel Steel Castings

Annealed and Unannealed

Manganese Steel Diamond Railway Crossings, Cement Mill
and Mining Machinery parts, Stone Crushing Plants

MACHINE MOULDED GEARS

any shape tooth specified made up to 18 feet in diameter
without the use of patterns

We solicit your patronage and prompt attention will be given to any orders.

FINISHING

BRASS & BRONZE

BUSHINGS

We have
a stock of over **One Hundred**
and **Fifty** assorted sizes of **BRONZE**
BUSHING CASTINGS well adapted for
your machinery repairs, bearings, journals, and
all kinds of work in which you have to use bushings.

Write for our Stock List.

We have the **equipment, experience and workmanship**
that assures quick, efficient, prompt and economical execution
of **BRASS FINISHING** and **SPECIAL MACHINERY**.

Manufacturers of Brass Nickel-Plated Marble
Trimmings for Lavatories and Toilets.

LYMBURNER LIMITED

5 to 15 Commissioners St., Montreal

BUSHINGS

SAWS FOR SHELLS

We have experimented on the
SPECIAL SHELL STEEL

and have produced a **HACK SAW BLADE** that will give unequalled service on this material in **HIGH-SPEED MACHINES**.

Possibly we could help you.

**"VICTOR BLADE—
CANADIAN-MADE"**

VICTOR SAW WORKS, LTD.
HAMILTON, ONT.



D. ROBERTSON & Co.

Limited

GREY LIME

GREY CREDIT

VALLEY STONE

Head Office—
201 CROWN OFFICE BUILDING
26 Queen East, Toronto

**Quarries and Kilns at Milton,
ONTARIO.**

WHO IS THE OLDEST MEMBER OF THE C.M.A.?

INDUSTRIAL CANADA has received the following interesting letter from Mr. John R. Barber, of Georgetown:—

"Georgetown, June 18, 1915.

"Mr. Editor:—

"Referring to the enclosed taken from the *Toronto Daily Star* of the tenth instant:

"The oldest member of the Association at the convention is Mr. George Booth, of the Booth-Coulter Copper and Brass Company, who is in fact the only remaining life member of the organization, but he is old only in years. He has been treasurer of the Association for a long time, and to-day, after he had presented his report with the vigor of a young man, he was unanimously re-elected to that important office, and was the recipient of many congratulations."

"If Mr. Booth was present at the first manufacturers' meeting held in Hamilton on August 13th, 1874, then he and I are the two oldest living members of the Manufacturers' Association. If he was not present at that meeting I can claim to be the oldest member. I would not wish to detract from the honor due to Mr. Booth, for while I have only been a full private in the ranks he has been a most efficient officer. Of the eleven men present at that first meeting I can only remember Edward Gurney's father, A. T. Wood, John Riordan and John McLean. Mr. Edward Gurney informed me that he was present at the meeting as an onlooker, having gone up with his father but being too young to take part in the proceedings.

"John McLean, father of Mr. W. F. McLean of the *Toronto World*, was responsible for the meeting being called and is entitled to the honor of having started the national policy movement in Canada.

"Yours truly,

"JOHN R. BARBER."

Further correspondence is invited.



**Manufacturers on Trip about Toronto Harbor,
Annual Convention**

Built-in Merit

The "Made-in-Canada" campaign was endorsed and ordered to be continued at the annual meeting of the Canadian Manufacturers Association.



Consumers are asked to patronize home industry.
Manufacturers are asked to guarantee **QUALITY**
and **PRICE**.

Our Lathes, Hack Saws and Shapers can meet all demands for quality and reasonable price.

The D. McKenzie Machinery Company
GUELPH, ONTARIO

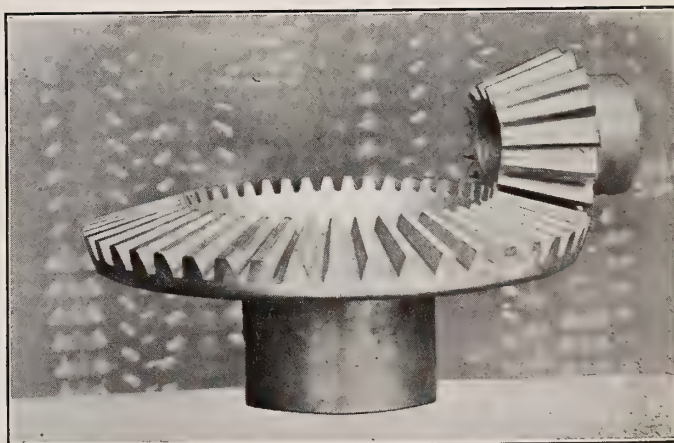
**CUT
GEARS**



GEARS

**This Shop Specializes in Good
Cut Gears**

Spur Gears up to - - 91 in.
Bevel Gears up to - - 62 in.
Worm Wheels up to - 108 in.
Helical or Spiral Gear up to 48 in.
Racks - - - - - 10 ft.



The Hamilton Gear and Machine Co.,
Corner Concord and Van Horne - - TORONTO

HAVE
SUNLIGHT
*in Your Factory and Offices
 by using*
NUWITE
Made in Canada

IT'S
 DURABLE, NON-POISONOUS
 AND WASHABLE

Write for Particulars and Free Sample to

Benjamin Moore & Co., Limited
Manufacturers of
MURESCO
 PAINTS, COLORS and VARNISHES
 (WEST) TORONTO

**The Maritime Bridge
 Company, Limited**

Successors to

Wm. P. McNeil & Company, Limited

Manufacturers of

**Bridges—Steel Buildings
 Roof Trusses—Turntables
 Towers—Girders and
 Structural Steel Work
 of all kinds**

Estimates Furnished Promptly

Large Tonnage of Plates, Shapes and Bars in Stock.

Office and Plant, NEW GLASGOW, N.S.

**1915 EDITION OF McKIM'S "CANADIAN NEWSPAPER
 DIRECTORY" NOW ISSUED.**

The 1915 edition of the *Canadian Newspaper Directory*, of which we have just received a copy, shows that the great war has not seriously affected the newspapers of Canada. While the birth-rate of new publications has received a check, and the death-rate of the weak ones has perhaps increased a trifle, most of the leading papers, particularly the dailies, show very healthy increases in circulation. Three metropolitan dailies have reached or passed the hundred thousand mark.

A census of the papers listed and described in the 1915 Directory shows nearly 150 dailies, 7 tri-weeklies, 45 semi-weeklies, over 1,065 weeklies, about 40 bi-weeklies or semi-monthlies, 250 monthlies, 3 bi-monthlies and 18 quarterlies—a total of over 1,575 publications.

This means approximately one daily to every 10,000 families, and one weekly to every 1,500 families. From this one would infer that for a comparatively new country, Canada is well-read.

A. McKim Limited report the usual keen demand for *The Canadian Newspaper Directory*, which sells at \$2.00.

NEW INCINERATOR AT BERLIN.

A huge modern municipal incinerator was opened in Berlin, Ontario, on May 28th. During the demonstration test the incinerator consumed 15 tons of garbage in eight hours. Its capacity is 30 tons. The plant is fireproof throughout and is an example of the high temperature method of destroying the rubbish which collects in a town or city.

The problem of dealing with garbage is one which every municipality must face. In most places the old-fashioned unsanitary method of piling unsightly heaps in ravines or on vacant lots is still in existence. In other places it is used for filling up gulleys or making land on water fronts. Where rubbish cannot be turned to some useful purpose the only sanitary method of dealing with it is to consume it in a manner which will be inoffensive and efficient.

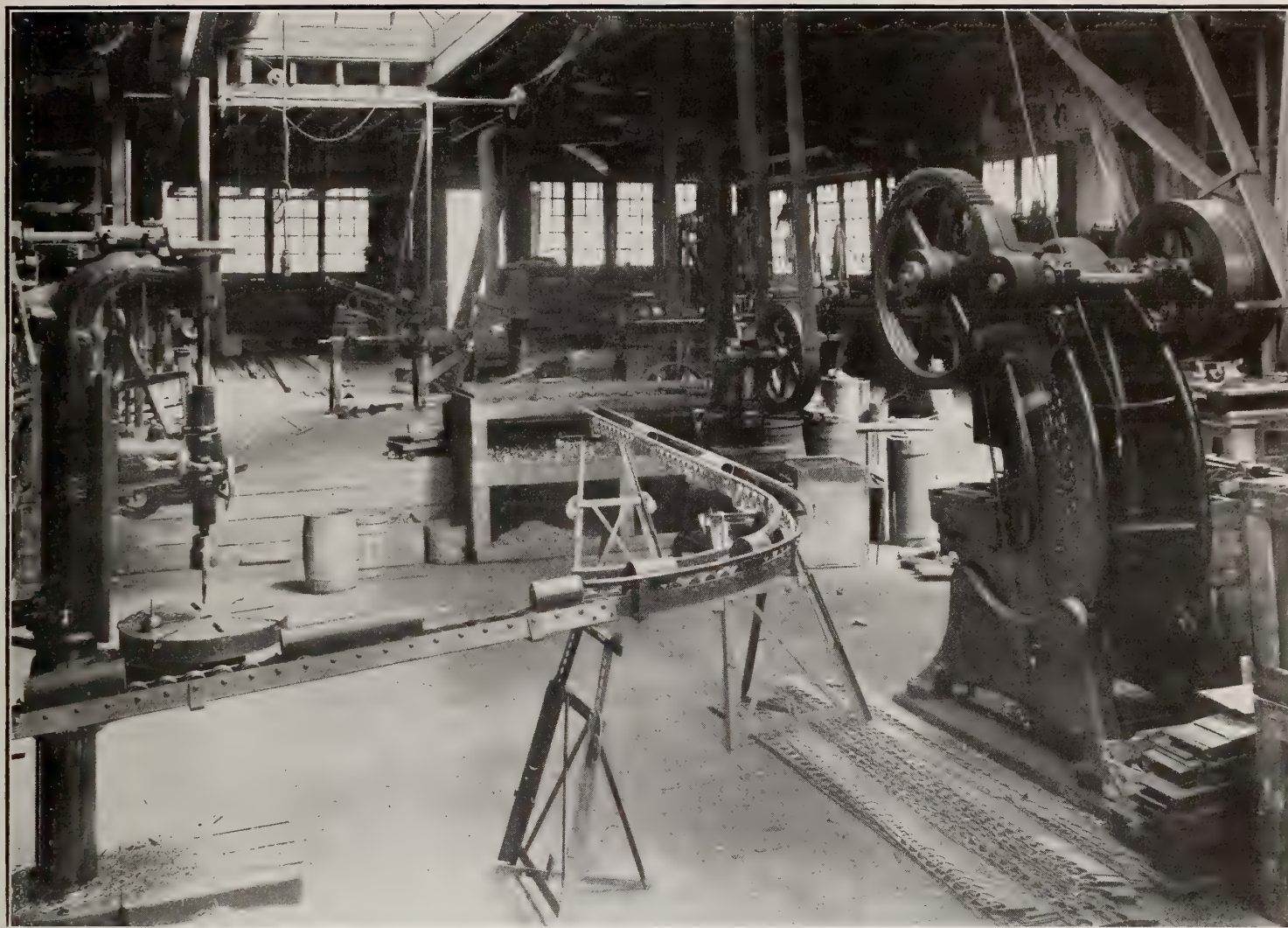
The Berlin plant is constantly ventilated through an air duct by means of a fan which collects 12,000 cubic feet per minute and forces all the foul air after being heated into the furnace. The Ideal Incinerator and Constructing Company, Limited, which installed the plant, claim that it will operate without dust, smoke or odor.

EXPORT RATES.

Through rates shown in C.P.R. Tariff No. E-2643 from Eastern Canada to Oriental and South Sea Island ports, including Australia and New Zealand, via Vancouver, B.C., will be cancelled by Sup. 1., effective July 28, 1915.

As the rates in the above tariff included the Ocean proportion and as the ocean carriers have been refusing to accept shipments at the rates shown in the tariff the cancellation was deemed necessary. Although the effective date of the cancellation is shown as July 28, 1915, yet in reality the rates are at present cancelled in so far as the ocean proportion is concerned. In order to take care of any traffic offering the C.P.R. have issued Tariff No. E-2656, G.T.R. No. C.N. 159, I.C.Ry. No. E.23, effective June 24, 1915, which shows the rates which will be applied from Eastern Canadian Points to Vancouver on traffic destined to Oriental or South Sea Island ports as shown in the tariff.

Ocean rates may be secured through the Asst. Export and Import Freight Agent's Office, Union Station, Toronto, direct, or through any local agent.



ATTENTION :

CANADIAN MANUFACTURERS OF SHELLS

"Necessity is the Mother of Invention." This has caused the production of a new **Ball Bearing Gravity Carrier**, simple in its construction and efficient in its ability. Manufacturers of shrapnel, lyddite and various types of shells have found a problem to solve in moving the shells; first from the cars to the stock piles in the billet form, then to the turret lathes and from each consecutive operation until the shell is complete. It has been necessary to do this by hand and of course each operation is expensive and adds to the cost. The above cut will give you an idea of what these machines will do and upon a grade of 4 per cent. (4 ft. fall in 100 ft.) it will deliver all these parts, it only being necessary for the operator to place the billet or shell upon the carrier and it moves by gravity to the next desired operation. The billets are being handled in the Plants of Steel Co. of Canada, Hamilton, by gravity upon our conveyors, also the Peck Rolling Mills, Montreal. If we can be of service a post card will bring information respecting prices, etc.; the prices being reasonable are within reach of every manufacturer.

Canadian Mathews Gravity Carrier Co., Ltd.
484 RICHMOND ST. WEST, TORONTO.

H. STROUD, Mgr. J. K. MARTIN, Supt.
JOHN LINDSAY, Sec.-Treas.

Paris Wincey Mills Company, Limited PARIS, CANADA

Manufacturers of

FLANNELS

Plain and Fancy, Union and All Wool,
Coat Linings, Tweeds, Serges, Etc.

THE MONTREAL COTTONS LIMITED

MANUFACTURERS OF

WHITE VICTORIA
LAWNS

WHITE NAINSOOKS

and

DYED COTTONS

OF EVERY DESCRIPTION

PULPWOOD AND PULP PRODUCTION IN 1914.

In 1914 Canada produced approximately 934,700 tons of wood pulp in her sixty-six active pulp mills. This is an increase of over 9 per cent from the production of 1913. Of this total quantity almost 70 per cent. was ground-wood pulp, produced by the mechanical process. The remainder was chemical fibre or cellulose, produced by the sulphate, sulphate and soda processes in the order of their importance.

The manufacture of chemical fibre is increasing more rapidly than that of ground-wood pulp. The increase in the case of chemical fibre from 1913 to 1914 was 14 per cent., while that of ground-wood pulp was 9.4 per cent.

This increase in the quantity of chemical pulp made is an advantage to Canada as it permits the use of a wider range of timber trees, thus developing more fully our Canadian forests. It is also nearly three times as valuable as wood-pulp and leaves that much more money in the country.

The introduction of the sulphate or kraft process for the manufacture of coarse, strong, dark-colored pulp used for wrapping and similar papers has permitted the use of jack pine and other so-called inferior pulpwoods in a greater proportion than had hitherto been possible.

In spite of the widespread disturbances to industry in general caused by the outbreak of war in the latter part of the year, the consumption of pulpwood in Canadian mills showed an increase of 10.4 per cent. in 1914.

The pulp industry has steadily increased in importance since its establishment in Canada about thirty-five years ago. Since 1910 the consumption of wood for this purpose has increased from 598,487 cords in 1910 to 1,224,376 cords in 1914, an increase of 104.6 per cent., or over 26 per cent. per annum.

The importance of the industry is shown by the fact that the value of the pulpwood used in Canadian mills in 1914 was \$8,089,868, while the value of pulpwood exported raw in the log was \$6,680,490, a total of \$14,770,358. The proportion of pulpwood manufactured in Canada to that exported raw is steadily increasing.

Quebec is the most important pulp-producing province, with 23 active firms in 1914 out of a total of 49 for Canada, producing over 55 per cent. of the total quantity of pulp. Ontario, British Columbia, New Brunswick and Nova Scotia are the remaining pulp-producing provinces in the order of their importance.

These facts are gleaned from the annual bulletin on "Pulpwood" just compiled at Ottawa and now in the hands of the printer. Anyone desiring to receive a copy of this bulletin or to get some particular facts on pulpwood and pulp will be freely furnished with the same by writing to the Director of Forestry, Department of the Interior, Ottawa.

HAMILTON FIRE INSURANCE CHANGES.

The Hamilton Fire Insurance Company has formed an affiliation with the Liverpool and London and Globe Insurance Company, and in future all policies issued by the former company will be guaranteed by the latter. Some of the directors of the Liverpool and London and Globe have purchased stock in the Hamilton company and one or two directors will take their places on the board of the Hamilton company. Mr. Russell T. Kelley will continue as manager, and the head office of the Hamilton Fire Insurance Company, whose name will not be changed, will remain in Hamilton. The company will, we understand, join the Canadian Fire Underwriters' Association.

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

For rates of freight and other information apply to

ELDER DEMPSTER & CO., Limited

318-319 BOARD OF TRADE BUILDING - - MONTREAL

Toronto Agent : S. J. SHARP, 19 Adelaide E.

THE

New Zealand Shipping Company, Limited

CANADA
TO

Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

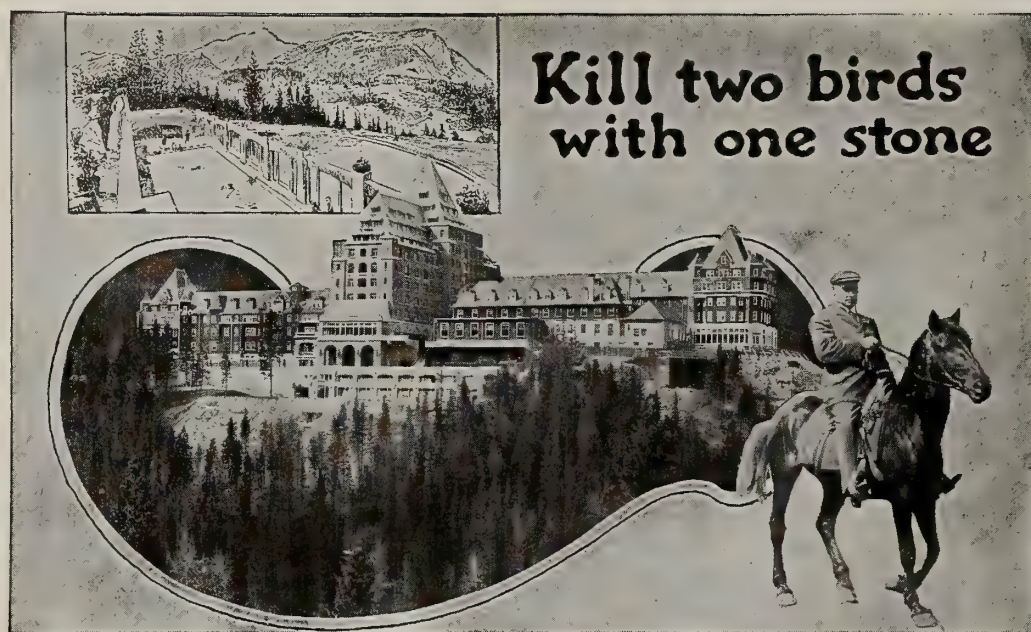
**The New Zealand Shipping Co.
LIMITED**

213 Board of Trade Building, Montreal

TRADE ENQUIRIES

NOTE.—For further information regarding any enquiry mentioned under this heading or the names of enquirers, apply by numbers to the Secretary, at Toronto.

100. **Paper.**—A Liverpool firm of brokers asked for names of Canadian manufacturers of parchment paper and grease-proof paper.
101. **Lithophone, Zinc Oxide and Powdered Litharge.**—A London firm asks to be placed in touch with Canadian manufacturers of lithophone, zinc oxide (dry and ground in oil), and powdered litharge.
102. **Pig Products, Canned Goods, Flour and Fruits.**—A Danish provision house wishes to obtain agencies for Canadian shippers of pig products, canned and preserved goods, flour and fruits.
103. **Toys and Manufactures of Wood.**—A firm of manufacturers' agents and merchants in Brisbane is desirous of obtaining agencies of Canadian manufacturers of toys and also of manufactures of wood, including dowels.
104. **Veneer Wood.**—A Glasgow firm of exporters desires to get offers of veneer wood, 21-inch by 21-inch by 24-inch and 24-inch by 19-inch by 19-inch, suitable for making cases for shipment of rubber.
105. **Veneer Chair Seats.**—A London firm seeks considerable supplies of three-ply wood veneer seats for chairs of the waxed relief shell pattern, 13 inches square, and will be pleased to receive prices per gross, ex dock London, accompanied by sample and statement as to time of delivery. Sample may be inspected at the Department of Trade and Commerce.
106. **Bronze Powder.**—A London firm wishing to purchase bronze powder asks to be placed in communication with Canadian manufacturers.
107. **Steel and Iron.**—A Nottingham firm inquires for sections and joists in quantities. Contracts for 100 tons.
108. **Barb Wire and Plain Fencing Wire.**—A Birmingham firm inquires for Canadian exporters of above.
109. **Navy and Garden Barrows.**—A firm in Birmingham is open to receive quotations.
110. **Wire Nails.**—A Birmingham firm is open to receive samples and quotations for ordinary wire nails, lath, slating, etc. When quoting please state basis price, with extras. Terms. How soon could supply and maximum quantity.
111. **Earthenware Sewer Pipes.**—A Newfoundland manufacturers' agent is open to receive quotations from Canadian manufacturers of sewer pipes.
112. **Harness.**—A Newfoundland dealer is open to receive quotations from Canadian manufacturers of driving and heavy harness.



and travel via THE

CANADIAN ROCKIES

to the

PANAMA PACIFIC EXPOSITION

If you are planning your 1915 trip to San Francisco, make sure your ticket reads via Canadian Pacific, otherwise you will miss the grandeur beauty of nature's most stupendous works—The Canadian Rockies.

BANFF LAKE LOUISE FIELD GLACIER

Are important tourist stop-over points on the Canadian Pacific Railway route to the Pacific Coast. These have excellent hotel accommodation, with opportunities for riding, climbing, swimming, boating and golf.

Agents will personally call on you to arrange your itinerary.

Particulars from any Canadian Pacific Ticket Agent, or write

M. G. MURPHY, District Passenger Agent, Toronto

CANADIAN GOVERNMENT RYS.

Operate 1897 Miles in Quebec and Maritime Provinces

INTERCOLONIAL RAILWAY :—Montreal, St. John, Halifax,
The Sydneys, 1475 miles.

PRINCE EDWARD ISLAND RAILWAY :—274 miles.

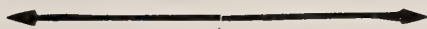
INTERNATIONAL RAILWAY :—Campbellton to St. Leonard,
112 miles.

NEW BRUNSWICK AND P.E.I. RAILWAY :—Sackville to
Cape Tormentine, 36 miles.

OCEAN LIMITED	DAILY
MARITIME EXPRESS	DAILY except Saturday

Between Montreal, Quebec, Moncton, St. John,
Halifax, with connection for Prince Edward Island,
The Sydneys, Newfoundland (except Sunday).

MONTREAL
and
HALIFAX



FAST FREIGHTS DAILY

H. H. MELANSON

General Passenger Agent, Moncton, N. B.

C. A. HAYES

General Traffic Manager, Moncton, N.B.

CANADIAN GOVERNMENT RYS.

COSMOS COTTON COMPANY

YARMOUTH, NOVA SCOTIA

Manufacturers of

COTTON DUCK

SAIL, WIDE AND OUNCE

BRANDS
"Yarmouth"
AND
"Champion"

PAPER MAKERS' FELTS A SPECIALTY

All widths up to 204 inches

"YARMOUTH" PAPER FELTS ARE UNEXCELLED

INQUIRIES SOLICITED

SOLE SELLING AGENTS

J. SPENCER TURNER CO.

86-88 Worth Street, NEW YORK and HAMILTON, ONTARIO



**NON
RUSTABLE**

D & A

CORSETS

Go elsewhere—if you find a corset department which through prejudice against "Made-in-Canada" goods does not sell the "D. & A" or the "La Diva" Corsets.

The superior value of the "D & A" and the "La Diva" Corsets has made hundreds of thousands of women wear them.

The "D & A" and the "La Diva" are made by the Dominion Corset Co., in one of the finest corset factories in the world. 7-15

DOMINION CORSET CO.

MONTREAL QUEBEC TORONTO

THE

Griffin Curled Hair Co.

LIMITED.

Manufacturers of—

STERILIZED CURLED HAIR

Dealers in—

Mattress and Upholsterers' Supplies

Office and Factory—
304 to 320 St. Helen's Ave.
Toronto, Ont.

Branch Office
and Warehouse—
252 St. James St.
Montreal, P.Q.

Write for Samples and Prices.

113. **Paper.**—A Glasgow firm, extensive publishers and wholesale manufacturing stationers, is anxious to get supplies of all sorts for this trade from Canada. Correspondence solicited at once.
114. **Enamelled Goods.**—Two hardware firms in Barbados wish to obtain enamelled hardware—mugs, ewers, basins, and dinner plates for ships, plumbers' supplies in lavatories, baths and closets.
115. **Carriage Supplies and Harness Leather, Hardware, Sulphate of Ammonia.**—A Barbados firm desires correspondence with Canadian manufacturers and exporters able to supply harness leather and carriage supplies, hardware and brass goods, and sulphate of ammonia.
116. **Iron Wire.**—A Birmingham firm is open to receive sample and quotations for above in the following gauges: .029, .030, .036, .040, .044, .048, .052. Can order 50 or 100-ton lots.
117. **Wire.**—A Redditch firm is open to receive quotations for wire either in coils or cut into lengths.
118. **Furniture.**—A Cape Town dealer requests correspondence from Canadian shippers of furniture ready for upholstery in the white and polished.
119. **Mattress Wire.**—A Birmingham firm is open to receive quotations from Canadian manufacturers of mattress wire.
120. **Wire Fencing, General Hardware, etc.**—A Birmingham firm inquires for manufacturers of wire fencing and galvanized corrugated iron sheets. They would also be glad to receive quotations for general Canadian hardware and are willing to act as sole agents for the Midlands if satisfactory terms can be arranged.
121. **Automobile Parts.**—A Midlands firm of automobile manufacturers desires the addresses of Canadian manufacturers who can supply motor component parts, chiefly stampings.
122. **Steel Forgings.**—A London merchant firm wishes to get into touch with Canadian manufacturers who can supply steel forgings.
123. **Birch Rails.**—A firm of upholsterers and cabinetmakers is in the market for twenty standards of birch rails cut to assorted lengths, and invite quotations, delivered free London docks, from Canadian shippers, according to the following specifications: Twenty standards of birch rails "off the saw," 2½ inches by 1½ inches, in assorted lengths of 50 inch, 34 inch, 32 inch, 30 inch, 28 inch, 26 inch., 24 inch, 21 inch and 20 inch.
124. **Wrought Iron and Steel Tubes and Fittings.**—A Middlesbrough correspondent has a demand for wrought iron and steel tubes and fittings, and would like to get into touch with Canadian manufacturers able to supply.

125. **Railway Wheels and Axles.**—A London firm of engineers is in the market for railway wheels and axles, and would lie to get into touch with Canadian manufacturers.
126. **Cement.**—A Newfoundland merchant asks to be put in touch with cement manufacturers in New Brunswick or Nova Scotia, the latter preferred owing to proximity.
127. A London manufacturing company who are large users of hogs' hair (preferably unwashed and undyed), are open to contract for regular supplies with Canadian packing plants or shippers.
128. **Smoked Hams, Salmon.**—The managers of a large departmental store in South America desire to hear from Canadian exporters of smoked hams and "best" class salmon.

129. **Printing Paper.**—A Norwegian firm with headquarters in Buenos Aires is desirous of hearing from Canadian exporters of printing paper.
130. **Ribbons, Leather Bands.**—A South American firm inquires for the names of Canadian exporters of ribbons for men's hats, hard and soft; leather bands for insides of hats; rabbits' hair.
131. **Box Shooks.**—Quotations are asked for immediately by a Cape Town firm on 100,000 sets of box shooks made from spruce deal, to be delivered not later than November next. Prices must be c.i.f. Cape Town. The sizes are as follows: Sides, 2 pieces, 18 inch by 5 inch by 3-16 inch; ends, 2 pieces, 11½ inch by 5 inch by ½ inch; tops and bottoms, 4 pieces, 18 inch by 3½ inch by ¼ inch.

We Are Ready for War

Can supply every Canadian Manufacturer and Jobber with their entire requirements of Steel and Brass Compression GREASE CUPS, Plain, Ratchet or Leather Washer Types, any finish desired. Also all styles of Oil Hole Covers.

A NEW ONE



Hinge Lid Pressed Brass Oil Cup

With Syphon Feed, if desired. No order too large to ship from stock. Anything special you have been importing we will gladly make to your order. If your Jobber can't supply you with WINKLEY Cups write us for prices and Catalogue.

CANADIAN WINKLEY CO., LTD.
WINDSOR, ONTARIO

QUALITY



SERVICE

UNEXCELLED

**Anhydros-Aqua-Carbonate
Ammonia**

Canadian Ammonia Co., Ltd.
TORONTO, ONT.

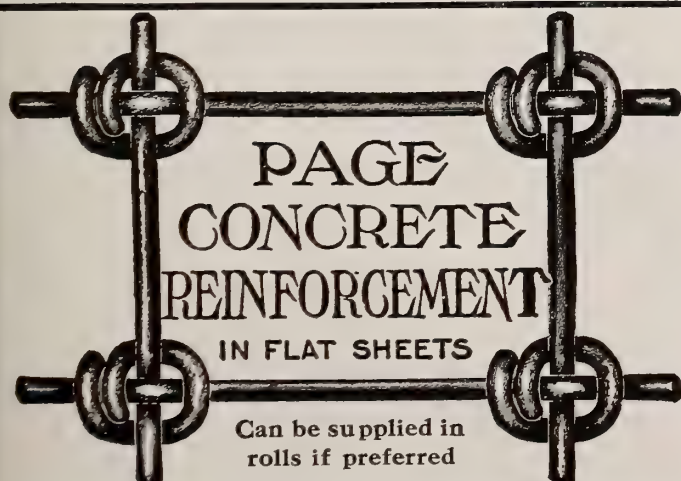
Stock Carried Also At

Halifax, N.S.
St. John, N.B.
Montreal, P.Q.

Quebec, Que.
Winnipeg, Man.
Calgary, Alta.
Edmonton, Alta.

Vancouver, B.C.
Victoria, B.C.
Prince Rupert, B.C.

EXPORT



For Concrete Road Pavement, Walks, Building Floors, Etc.

We are the *originators* of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. Also, other meshes as desired. All sheets 4 feet wide, and any length specified that can be loaded in cars.

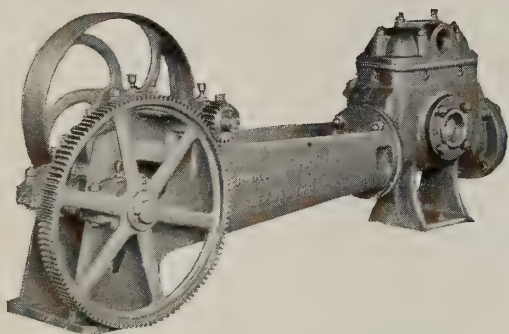
Samples will be sent upon request

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

The Page Wire Fence Co., Limited

Dept. 20a
1137 King St. W. 505 Notre Dame St. W. 87 Church St. 39 Dock St.
TORONTO MONTREAL WALKERVILLE ST. JOHN, N.B.

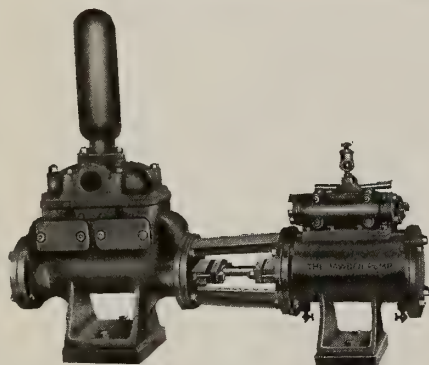
BAWDEN PUMPS



Are specified by many of the leading engineers because they have proven to be a Canadian Pump equal to any in the world and worthy of the name,

**CANADIAN
MADE**

PUMPS FOR ALL PURPOSES



*Hydraulic
Presses
and
Special
Machinery*

BAWDEN MACHINE CO., LTD.
STERLING ROAD - TORONTO, CANADA

132. **Paper.**—A firm in Glasgow of wholesale and export stationers inquires for samples and quotations of the following papers: Vegetable parchment, grease proof, bag papers, kraft, news, wrapping and manilla. Samples and quotations asked for.

133. **Furniture.**—A large importing house in Buenos Aires handling only the highest class furniture, carpets, etc., would be glad to assist Canadian exporters of high-grade furniture, office and household, who desire to extend their trade to South America.

134. An enquiry is made by a London leather goods manufacturer for purse and bag frames (light stamped metal), for which he claims there is a big opening. A sample has been placed at our disposal and will be sent to interested manufacturers in order of receipt of request.

135. **Plumbers' and Sheet Metal Workers' Supplies.**—An agent in San Francisco is desirous of being supplied with catalogues and discount sheets by Canadian manufacturers of the above goods.

136. **Locomotive Engines and Rails.**—An agent who has acted as Trade Investigator for Belgium, in Russia, is desirous of getting into touch with Canadian manufacturers of locomotives and rails with a view to representing them in Russia.

SUMMER DWELLING INSURANCE.

The following judgment is of interest to most of us, especially as this summer a number of the summer cottages owned by members of the Association may not be occupied. We would suggest that those who are fortunate enough to own a summer cottage should check over their policy and if necessary have the insurance company attach an endorsement for permission to remain vacant during the summer months.

In this particular case the premises were unoccupied and because he had failed to give due notice within the legal delays specified in his policy, D. Anderson lost two suits entered respectively, against the Norwich Union and Scottish Union Insurance Companies. The policies stated that notice of loss was to be given within 60 days; the plaintiff did not give such notice till after a period of some nine months. Mr. Justice MacLennan dismissed the suit which in both instances was for \$2,000.

He took out one of the policies with the Norwich some 22 years ago, this being for \$2,000; some years later he took out another in the Scottish Union for a similar amount. He represented that in taking out the policies his intention was made perfectly clear that the insurance was to cover a summer residence, and it was generally stated in the first policy that the residence was to be generally vacated from October till May each year. Hence, claimed plaintiff, it was clearly understood that the policies covered a summer residence.

The defendants opposed the action on several grounds. Though the first policy stated that, generally, the house was to be unoccupied from October till May, plaintiff could not read such a condition into the second policy; anyway, the fire had taken place in July, and the premises were then, and had been for a long time previous to that time, unoccupied.

The Canadian Meter Co., Ltd.



Manufacturers of

METERS

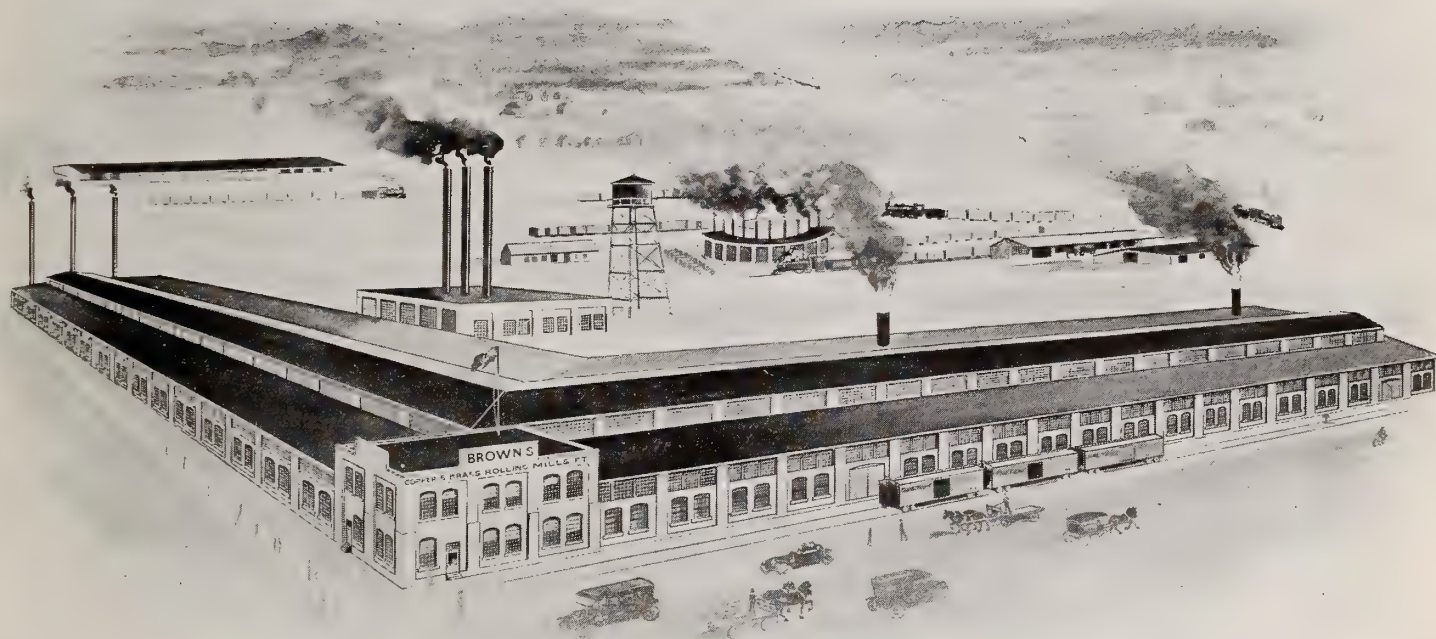
For Acetylene, Coal, Gasoline
and Natural Gases
also for Air

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WORKS : HAMILTON, CANADA

90 Caroline St. N.

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COPPER



NEW PLANT OF BROWN'S COPPER AND BRASS ROLLING MILLS LIMITED,
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PRINCIPAL PRODUCTS

BRASS, COPPER, GERMAN SILVER

IN EVERY VARIETY OF SHEETS, ROLLS, PLATES AND RODS

ANGLES, CHANNELS, CIRCLES, MOULDINGS

LET US QUOTE ON YOUR REQUIREMENTS

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Limited
NEW TORONTO ONTARIO



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**ELEVATED STEEL TANKS
 AND STANDPIPES**

For Municipal, Railroad
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We also build Oil Tanks, Coaling Stations, Bridges, Turntables, Buildings and Structural Material. Write for illustrated Catalogue No. 25.

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NOTICE

To Manufacturers, Dealers
 and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, **D. M. MEDCALF,**
 Minister of Public Works. Chief Inspector of Steam Boilers.

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Hardwood Flooring and Hardwood Interior Finish

WE are one of the oldest and largest manufacturers in those lines; also Pine Doors, Sash, and all kinds of Interior Trim.

SPECIALTIES:

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Made to Detail

Office Fixtures,
 Stair Building,
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GET OUR PRICES AND SAMPLES

Wilson Bros., Limited

COLLINGWOOD

ONTARIO

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Calgary, Alta.

Tenders have been received by the Alberta Farmers' Co-operative Company, Limited, for the supply of lumber necessary to erect from one to ten elevators in Alberta. Specifications may be seen at the office of the company.

The general contract for the erection of stores and offices for T. J. Skinner has been let to T. Baird, at an approximate cost of \$16,500.

Sedgewick, Alta.

The elevator of the Alberta Farmers' Co-operative Elevator Company, Limited, which was recently destroyed by fire will be rebuilt.

BRITISH COLUMBIA.

British Columbia Province.

The Department of Agriculture are considering the construction of a number of silos at Burton, Arrow Lake, Revelstoke, Kelowna, Ladysmith, Summerland, Penticton, Salt Spring Island, Armstrong, Denison and Ladner.

Castlegar, B.C.

The mill of the Edgewood Lumber Company will be opened. Good reports of trade activity are being received by the company and as the crop prospects are good prairie farmers are placing orders for lumber.

Fernie, B.C.

The Crow's Nest Pass Coal Company intend installing a modern by-product recovery plant, which will cost in the neighborhood of \$750,000. It is reported that the foundations for the ovens will go in this fall, and that the plant will be of the Belgian type, the chief products being ammonium sulphate, benzole, tar and creosote. This will be the first plant of the kind in B.C.

Fraser Valley, B.C.

W. D. Raven is erecting a shingle mill at Hatzic, which will shortly be in operation.

Stewart, Davenport, Miller and Slater have taken over the Jackman Lumber Mill at Jackman, which has been closed for some time. The plant is being overhauled and additional machinery installed.

Grand Forks, B.C.

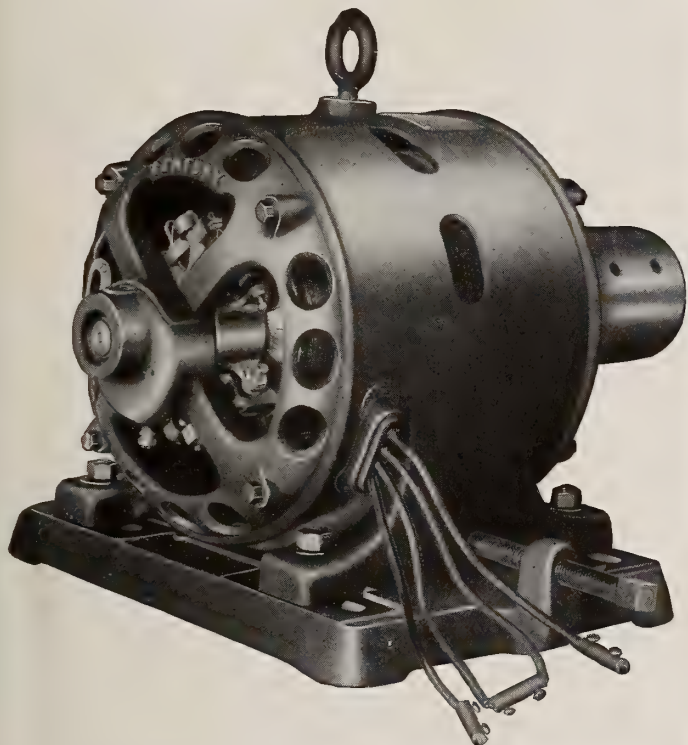
The B.C. Lumber Company's mill at Cascade which has been idle since last July has resumed operations, employing sixty-five men.

Jones & Moore Electric Co.

LIMITED

294-300 Adelaide St. W.

Toronto



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REPAIRS PROMPTLY PERFORMED

"Metallic" Building Materials

This is the Age for Metallic Construction

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for WAR ORDERS

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This department is equipped to handle a large volume of business in record time and do it in a first-class manner.

Coupled with this service we have connections with an experienced corps of erectors who will put your building up in a hurry and put it up right.

Tell us what you need and, if necessary, we'll send one of our men to see you and get full particulars so that we can give you the best service.

Write us or phone us at our expense.

**The Metal Shingle
& Siding Company**
 Limited - PRESTON - Ont.

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Manufacture in Canada

Our
Babbitt
Metals
Give
Excel-
lent
Service



We
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Proud
of the
Goods
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FOR GENERAL MACHINERY BEARINGS

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WE HAVE EVERYTHING IN METALS

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Head Office and Factory, Toronto Branch Factories, Montreal, Winnipeg

DROP FORGINGS

OF ALL KINDS

Canadian Billings & Spencer

Limited

Welland, Ontario

Greenwood, B.C.

The B.C. Copper Company have resumed production from the Motherlode mine and will blow in the Greenwood smelter about July 1st.

Herring's Point, B.C.

Pile driving for the salmon cannery now being erected by the Liverpool Canning Company has been completed by the Fraser River Pile Driving Company.

Mission, B.C.

The King-Beach Company, Ltd., have purchased the plant and factory of the Kootenay Jam Co., Ltd., from the debenture holders and will install new and additional machinery for the manufacture of high-class jams and preserved fruits and also cocoa and chocolate. Mr. Beach was a member of the English firm of T. W. Beach & Sons, Ltd., the well-known jam makers, and English capital is interested in the undertaking.

Nelson, B.C.

A despatch from Nelson states that the Western Canada Timber Company will start up its plant at Gerrard shortly.

New Denver, B.C.

The United Copper Mine at Chewelah have nearly completed their new twenty-stamp mill, which will be in operation in July, increasing the output to 200 tons daily.

New Westminster, B.C.

The Vancouver-Prince Rupert Meat Company will occupy the new \$20,000 business block to be erected this summer at the corner of Columbia and Begbie Streets.

The shingle mill being erected by the Shull Shingle Company on the north arm of the Fraser River is nearing completion, and the installation of the machinery is well under way.

Contract has been let for the second unit of the Government jetty in the Fraser River, to the Marsh Hutton Powers Co., at a cost of \$400,000. Nearly five hundred will be employed.

The Liverpool Canning Company are erecting a cannery at a cost of \$10,000.

Phoenix, B.C.

The four hundred and fifty men on the payroll of the Granby Company at their Phoenix mines are receiving a bonus of 25 cents per shift, owing to the high price of copper.

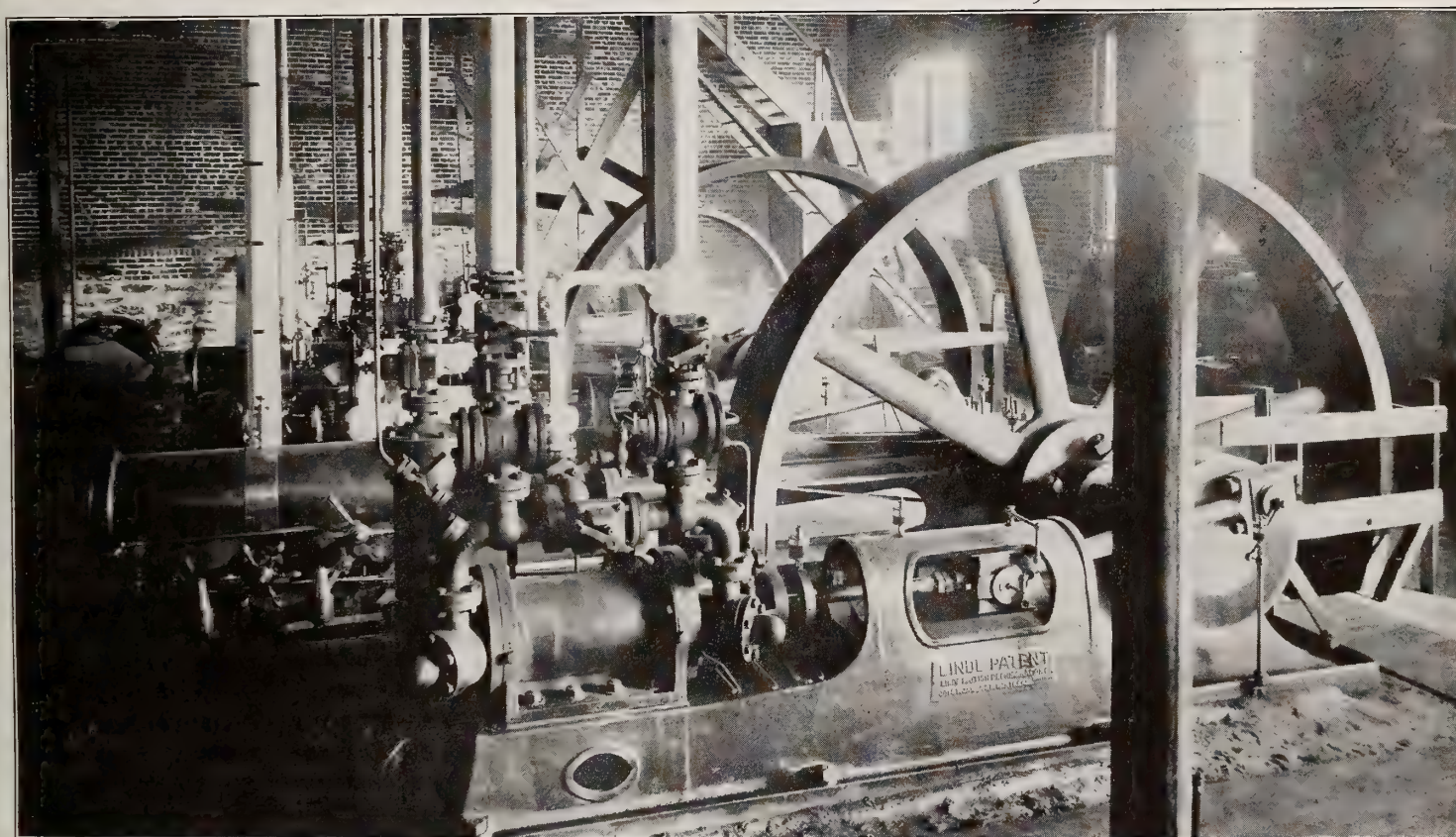
Prince Rupert, B.C.

The Booth Company, one of the largest handlers of fish, intend locating at Prince Rupert, where they will build a cold-storage plant and wharves.

REDUCE YOUR COST OF PRODUCTION

And Improve Your Product With Refrigerating Machinery

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TO SHOW YOU HOW YOU
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MALLEABLE IRON CASTINGS

HIGH TENSILE STRENGTH



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(Successors to the Standard Drain Pipe Co.)

MANUFACTURERS OF

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Stove Bricks, and all kinds of
Fire Clay Specials.

Operating THREE Sewer
Pipe Plants and Fire Clay
Factory

FACTORIES AT ST. JOHNS, P.Q., AND
NEW GLASGOW, N.S.

Prince Rupert, B.C.

The great dry dock here, which is the joint property of the Federal Government and the Grand Trunk Pacific, will be advanced so far that it is expected shipbuilding will be ready to start by next August. The dry dock when finished will have cost some \$3,000,000, and will be one of the largest, if not actually the largest in the world.

Princeton, B.C.

A syndicate is negotiating for the purchase of the plant of the B.C. Portland Cement Company, which has not been in operation for some time. A large quantity of raw material is available in the district for the manufacture of the highest class cement.

Vancouver, B.C.

A despatch from Vancouver states that the British Columbia Mills, Timber & Trading Company have received an order from the British Admiralty for 10,000,000 feet of mixed lumber. Mr. Eric Hamber, Vice-President of the company, states that this will enable them to open up more of their northern camps.

The city is making application to the Dominion Railway Board, asking for an order directing the Vancouver, Victoria and Eastern Railway to commence the construction of the freight and passenger terminals on False Creek.

Tenders will shortly be called for by the Shell Oil Co., Fifth and Carolina Streets, for the erection of a distributing station.

C. L. Terry of this city recently purchased from the Provincial Government over 3,300,000 feet of timber situated on Huaskin Lake, near Drury Inlet. The stand of cedar is 2,500,000 feet. Prices realized were \$1.00 per thousand for cedar and spruce and for other species 50 cents per thousand.

The Shell Committee have increased the orders for 18-pr. high explosive shells to be manufactured in Vancouver and Victoria shops to 85,000. The various shops have now completed their installation of special machinery required and the first shipment of steel billets is expected in a week.

A number of local shops have been asked to tender on a sub-contract for hand grenades.

A syndicate has been formed to construct four ships for the lumber carrying trade of B.C. No contract has so far been let, but work will be commenced shortly, the ships to be constructed in local shipyards.

The B.C. Grinnel Glove Company are building a factory in Vancouver for the manufacture of gloves, their present plant at Coquitlam to be used in future exclusively as a tannery.

A. Waddington has commenced operations as a manufacturer of shirts and overalls.

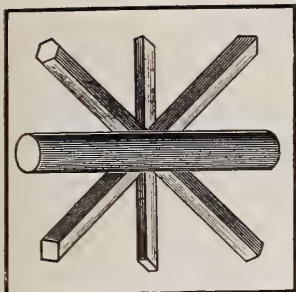
A number of inquiries have been received locally for clear spruce for the manufacture of aeroplanes, for which the wood is especially suitable, and one large firm manufacturing for the various Governments is inquiring into the possibility of establishing a factory here.

The Georgia-Harris Viaduct has been completed and will be thrown open to traffic as soon as the engineers have certified that everything is in satisfactory condition. The viaduct cost \$500,000 and took two years to build.

Vernon, B.C.

Twenty-two of the twenty-nine sawmills on the Okanagan are in operation this season, which is much better than last year.

The Okanagan United Growers have contracted to ship 35,000 boxes of apples this season to Australia, and 9,000 to South Africa. Boxes this season are all of local manufacture.



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SHAFTING

ROUNDS, SQUARES, HEXAGONS AND FLATS

 $\frac{1}{8}$ in. to 6 in Dia. $\frac{1}{4}$ in. to $2\frac{1}{4}$ in. $\frac{1}{4}$ in. to $2\frac{1}{4}$ in. up to $1\frac{1}{2}$ in. x 3 in.

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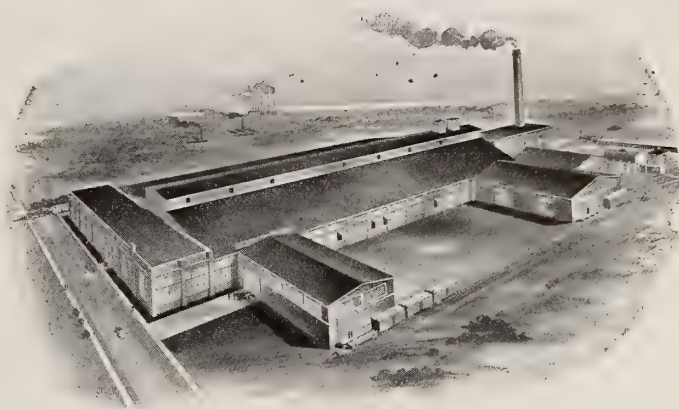
PISTON AND PUMP RODS

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SHOVELS, SPADES,
SCOOPS, DRAINING
TOOLS, SNOW
SHOVELS AND SIDE-
WALK SCRAPERS.

HAMILTON - CANADA

Victoria, B.C.

A shipment of 900,000 feet of lumber has been sent to San Francisco, which is said to be the first direct cargo of lumber to be shipped from Vancouver Island to San Francisco. It is anticipated that there will be more business along this line. A strong demand also exists in Australia for lumber and vessels are being chartered on the Pacific Coast for Australian trade.

MANITOBA.

Brandon, Man.

An up-to-date elevator with cement tanks, also a modern cleaning plant will be installed in the Western Canada Flour Mills.

Winnipeg, Man.

A Dominion charter has been secured by the Kennedy Lumber Company, Limited, to carry on business as general lumber and timber manufacturers, with head office here. The incorporators include R. Siderfin, J. Ledingham, W. J. Allen, J. G. Crawford and E. F. Haffner, all of Winnipeg.

NEW BRUNSWICK.

Fredericton, N.B.

It is understood that J. Fred Ryan of this city will be awarded the contract for the construction of an annex to the Victoria Hospital.

Messrs. McLaggan, McBean and Bell have been awarded the contract for the erection of the I.C.R. stations at Derby Junction and Humphries.

Hastings, N.B.

Mr. Manning Smith has finished his lumber cutting operations at Waterside, N.B., and is removing his mill here.

New Brunswick Province.

Tenders have been received by the Department of Railways and Canals, Ottawa, for the construction of nine bridges on the main line of the Intercolonial Railway. Secretary, J. W. Pugsley.

St. John, N.B.

The representative of W. H. Thorne & Co., Limited, has returned from a European buying trip and reports business conditions fairly normal in some parts of France and England. He attended the Industrial Manufacturers' Exhibition in London, the object of which was to show Britain's ability to compete for foreign trade against Germany.

A Montreal dry-goods traveller remarked on Saturday that he had been twenty-six years on the road and he had never seen business any better in the Maritime Provinces than it has been lately. Like reports are heard from travellers in other lines. The industrial situation is encouraging. Reports received by the Board of Trade from local boards indicate satisfactory conditions. From Moncton comes the statement that there is more building being done this year than ever before in the history of the town. At Fredericton, the contract has been let for a \$20,000 annex to the hospital. The Smith Foundry Company have a contract for the manufacture of shells amounting to \$125,000. The Canadian Cottons, Ltd., at Marysville is running full time. Bathurst is about to install a water and sewerage service, and has dis-



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BUTTERFIELD'S

They are accurate. They cut clean.
They are guaranteed.

If you like accurate thread cutting get

Reece's Screw Plate

It contributes speed. Has adjustable Dies.

BUTTERFIELD & CO. (Incorporated)

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RIVETS

ROUND HEAD **COUNTERSUNK HEAD** **CONE HEAD** **WAGON BOX HEAD** **FLAT HEAD** **WHEEL HEAD**

We manufacture Rivets of every description, $\frac{1}{2}$ inch dia. and smaller.

Copper Belt Rivets and Burrs, Coppered Belt Rivets and Burrs, Bifurcated or Slotted Rivets, Tubular Rivets.

Our price is right and our service prompt.

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GANANOQUE, ONT.

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Manufacturers of

**Hanging, Bag,
Wrapping, News and
Colored Poster
Papers,
Roofing, Lining and
Carpet Felts.**

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Do you know— The Advantages of Automatic Weighing?

They are the advantages that naturally result when machine work takes the place of man work. The human factor, with its liability to error, is eliminated and mechanical accuracy and quickness substituted. You merely put the load on and read the results. Loose Weights — Mental Calculations — Errors — avoided. High Speed attained. Great Saving in Time and Labor.

**TOLEDO SCALES
MADE IN CANADA**

Represent the highest efficiency in Automatic weighing.

Toledo Scale Company

Factory - WINDSOR - Ontario
Offices in all principal cities.



A Scale for every need—Dormant—Portable—Hanging—Counter types.

posed of \$75,000 5 per cent. bonds at 95½ per cent. for that purpose. At St. Andrews, the C.P.R. has just opened its splendid new hotel the Algonquin. The tuberculosis hospital at St. John, which cost \$60,000, is nearing completion. The new Dominion Post-Office is also reaching its finishing stage. Some residential erection is going on, but the building trade could stand more activity. The demand for vessels for lumber freights has fallen off slightly, but there has been little change in freights.

NOVA SCOTIA.

Baddeck, N.S.

The erection of a flour mill is being considered by the Department of Agriculture, Truro, N.S. Secretary Melville Cumming, Truro. Machinery of the latest rural mill type will be required.

Bridgewater, N.S.

Alterations to the foundry of the Acadia Gas Engine Company have been commenced and machinery, castings, etc., will be required.

Halifax, N.S.

F. R. Little has let the contract for the erection of a business block of concrete construction to Thomson & Theakston.

ONTARIO.

Berlin, Ont.

Casper Braun has been awarded the contract for a \$15,000 brick addition to the Strange St. School.

Brantford, Ont.

Messrs. Schultz Bros. & Co., Limited, have been awarded the general contract for the erection of a departmental store for W. C. Livingston. Heating may be sub-let. The approximate cost is \$70,000.

Chatham, Ont.

The McClary Building, which was recently destroyed by fire, will be rebuilt.

Dashwood, Ont.

Work has been started in connection with the addition to the grist mill of Jacob Kellerman. White brick construction concrete foundations, shingle roofing. Estimated cost \$7,000.

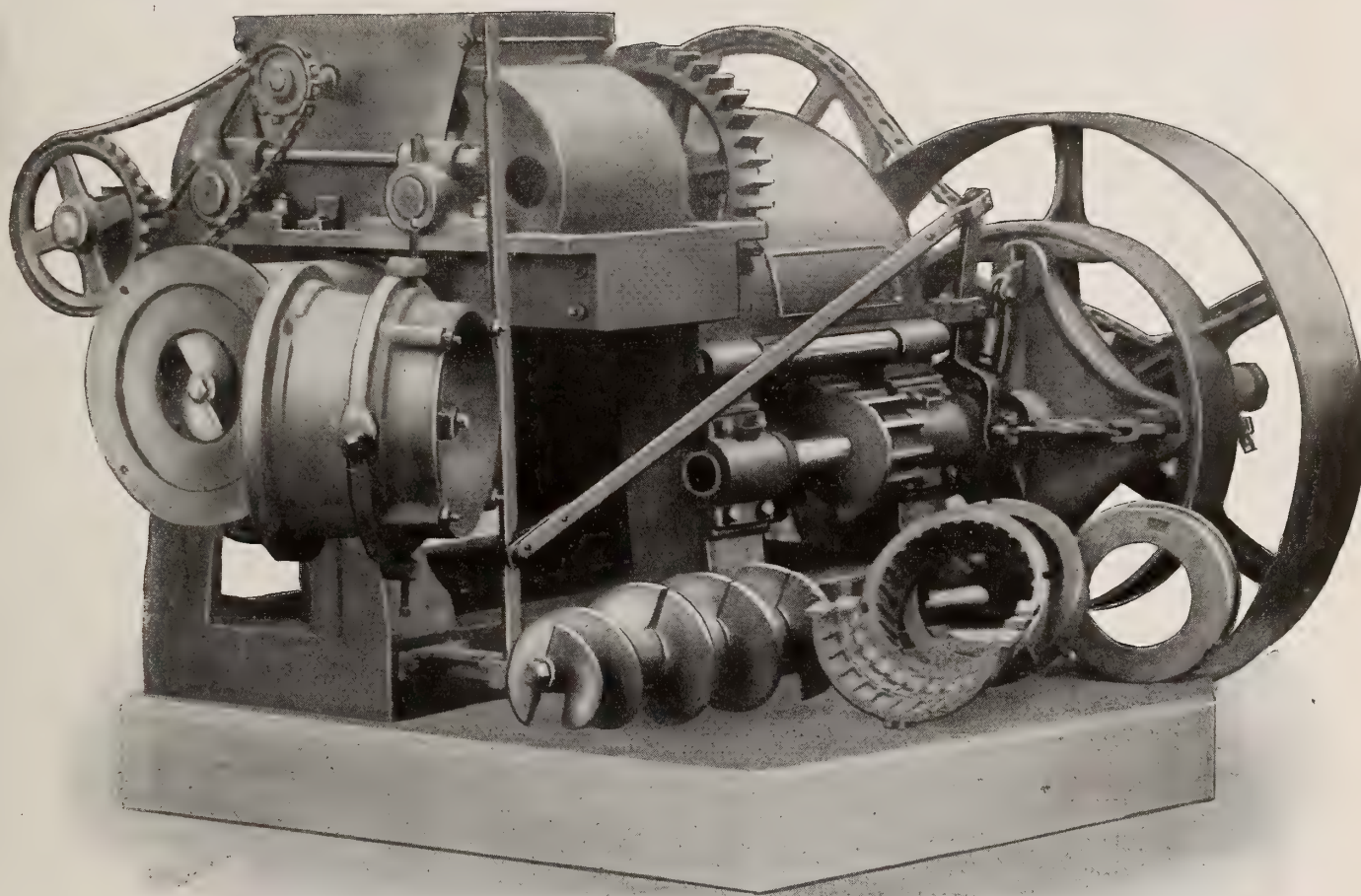
Dundalk, Ont.

A. C. McDonell, Dundalk, has been given the contract for the erection of a hydro-electric sub-station.

Dundas, Ont.

The John Bertram & Sons Company have found it necessary to construct a new shop for testing the shells which they are manufacturing. It will be built of steel and concrete.

MADE IN CANADA



The New and Improved Kells Combined Machine For Brick, Tile and Hollow-ware

Made in two sizes. Capacity 20,000-3" tile per day of ten hours. All other sizes up to 12" in proportion.

The knives form a continuous auger and run in a ribbed cast iron lining which can easily be replaced. Any of our No. 2 Kells machines can have this new attachment put on at a reasonable cost.

We also manufacture a full line of sand stock brick machinery, pugmills:—right and left hand side delivery, end and bottom delivery, square or bevel gear, any length from 4' up. Brick moulds any size made to special dimensions, barrows, trucks, clay cars, automatic cut-off tables for brick and tile, grate bars, kiln doors, kiln irons, steel rails and switches.

*Agent for Cornell's Pat'd Round Down Draft Kiln for Coal
and Wood. For full particulars, catalogue and prices address*

H. C. Baird, Son & Company, Limited
PARKHILL, ONTARIO, CANADA

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STRONG-SCOTT MFG. CO.
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Flour Mill and Elevator
Machinery

Elevating, Conveying,
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 Power Transmission
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FOUNDERS and MACHINISTS

ROLL GRINDING and CORRUGATING
 A SPECIALTY

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MANITOBA

ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine
 shop caused by the metal gears?

Wouldn't you like to stop
 that noise? You can do it
 by using

**NEW PROCESS GEARS
 RAWHIDE PINIONS**

They last indefinitely too.

Ask us about it.

R. GARDNER & SON, LIMITED
 Hazareth, Brennan and Dalhousie Streets
 MONTREAL

Hamilton, Ont.

The City Council have adopted the recommendation of the Board of Control regarding an agreement with the Canadian Cartridge Company, which provides for the sale of two acres of land to the company at \$4,500 an acre. The company will start work at once on the construction of buildings at a cost of between \$30,000 and \$40,000.

The Canadian Hart Wheel Co., Limited, contemplate the erection of an addition to their factory at an estimated cost of \$3,000. Brick construction, concrete foundation, concrete floors.

Kingston, Ont.

Work has been commenced on the new garbage incinerator here. The capacity of the plant will be about fifteen tons a day, and it is estimated that the garbage production of this city at the present time is only ten or twelve tons a day.

The Canadian Locomotive Company have received a contract from the Russian Government for the manufacture of fifty large locomotives. This will necessitate increasing the number of employees to 1,000.

London, Ont.

The Ford Motor Company are contemplating a three-storey addition to their plant but the work may not be started till 1916.

Maxville, Ont.

Plans are being prepared by the engineer of the Borden Milk Company, Limited, Montreal, for the erection of a condensed milk factory here.

Muncey, Ont.

Fireproof structures will replace the farm buildings of the Mount Elgin Institute, recently destroyed by fire. Creamery and dairy equipment will be required. Particulars from the Rev. S. R. McVitty.

Niagara Falls, Ont.

Contract for heating and plumbing in connection with the erection of a box factory for Messrs. Pinneo & Sons, has been let to G. O. Gray, Queen Street, and the contract for electrical work to Carter Electrical Company, Erie Avenue.

Ottawa, Ont.

The lumber trade continues quiet, the only activity of note being a demand from the United States. The high ocean freight rates are still presenting great difficulties in connection with shipments to England. The trade with the West Indies and South America is very quiet on account of scarcity of money in those countries and shortage of vessels.

Tenders will be received until June 28th for the erection of an agricultural building on the experimental farm for the Department of Public Works.—concrete foundation, stone and brick construction, felt and asbestos roofing. Plans and specifications are at the Department.

The Thomas Wilson Lumber Company, Limited, has received a Dominion charter to carry on business as manufacturers and dealers in timber and woods of all kinds.

Dominion Steel Corporation

Limited

Dominion Coal Co., Limited
 Cumberland Railway & Coal Co.
 Dominion Iron Steel Co., Limited
 Black Diamond Steamship Co.



Miners and Distributors of

**“DOMINION” AND “CUMBERLAND”
 STEAM, GAS, AND HOUSE COALS**

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HALIFAX, N.S. ST. JOHN, N.B. THREE RIVERS
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 CHARLOTTETOWN, P.E.I.

Manufacturers of

Pig Iron Steel Blooms and Billets Rails
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 Plain, Annealed, and Galvanized Wire and Wire Fencings
 Bright, Blued, Coated and Galvanized Nails, etc.
 Sulphate of Ammonia Sulphuric Acid

Prompt Shipment from Mills or Stock at SYDNEY, N.S., or from Warehouses
 at TORONTO, MONTREAL and HEAD OF LAKES.

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to write for our dealers' proposition covering the best and most modern building material ever placed on the Canadian market. Manufactured in a Canadian factory by Canadian workmen, for the building of Canadian homes, to shelter Canadian people. It makes warm, dry, sanitary walls and ceilings, which do not warp or twist, and which are moisture and vermin proof.

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Lathboard
Stucco Board
Plaster Board
Sheathing
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should be in the stock of every Building Supply House, everywhere. We will supply direct where not carried in stock.

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that we have
BEEN TO THE FRONT
for 40 years in the manufacture of

Machinery Forgings and Tools;
Cast Steel Dies: Nickel Steel Gear
Blanks; Contractors' Ironwork
and Bolts.

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SHELL GAUGES

Abattoir and Packing House
Machinery and Supplies a
Specialty.

The JOHN WHITFIELD CO.

Engineers and Machinists

Corner Front and Sherbourne Streets

Established 1874

TORONTO

Pictou, Ont.

The D. J. Barker Foundry Company having purchased the business of the former owner, D. J. Barker, has commenced operations.

Port Colborne, Ont.

The Port Colborne Rink Company has let the contract for the erection of a skating rink to A. Sweet, King Street.

Rodney, Ont.

The Rodney Woodenware Company, Limited, recently suffered a loss by fire.

Russell, Ont.

A large part of the business section of the village was destroyed by fire at a loss of \$75,000 which is fairly well covered by insurance. The buildings are to be rebuilt without delay.

St. Catharines, Ont.

The contract for the new Collegiate Institute has been awarded to Newman Brothers, 75 St. Paul Street.

St. Thomas, Ont.

Work is about to commence on the erection of a planing mill for E. S. Hatch, estimated cost \$5,000.

The St. Thomas Metallic Grave Vault Company are having special machinery installed in their factory for the manufacture of 25,000 shells of the 18-lb. high explosive variety. The contract was awarded recently.

Seeley's Bay, Ont.

The Kingston Brick & Tile Company who have been turning out large quantities of drain tile, are about to commence manufacturing brick.

Thorold, Ont.

The Thorold Pulp Mill, which was destroyed by fire last December, and has been rebuilt, was started up on May 31st and is now running night and day.

Toronto, Ont.

Hastings County Marble Company, Limited, is the name of a firm incorporated recently here for the purpose of mining and quarrying marble, stone, and other materials.

Walkerville, Ont.

The Swedish Crucible Steel Company of Canada, Limited, are putting up a large frame addition to their factory here.

Welland, Ont.

The Oranova Brick Manufacturing Company have started work here. The company will operate on the co-operative plan. The site of their factory has a frontage of a quarter of a mile on the M.C.Rr, which railway will run a switch into the works.

The Canadian Billings & Spencer, Limited, will begin work on an addition 70 x 80 feet to their plant. Six new drop hammers will be installed.

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Tire Bolts,	Hexagon Nuts,
Machine Bolts,	Boiler Rivets,
Sleigh Shoe	Tinners'
Bolts,	Rivets, Etc.



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QUEBEC.

Barnston Township, Que.

W. K. Baldwin, of Baldwin's Mills, Que., is about to commence work on the construction of a sawmill and is in the market for machinery, shafting, belts, etc. The estimated cost is \$10,000.

Montreal, Que.

The lumber trade is experiencing a lull although some of the trade are looking for improvement soon. Export shipments by the regular liners are light, as the Government are using so great an amount of the available vessel space. Most of the exports are spruce and birch.

The Valleyfield Iron Works had their plant gutted by fire, causing a loss of \$10,000. Owners, Webster & Sons, Limited, 331 Wellington St.

The premises of the Union Brewery, Limited, were destroyed by fire.

St. Lawrence Machinery, Limited, is the name of a company incorporated recently to carry on the business of machinists and mechanical, electrical and civil engineers here. The incorporators of the company, which has a capital stock of \$50,000, are C. F. Smith, E. E. Cummings, Jr., H. J. Trihey, P. Berovitch and E. Lafontaine, all of this city.

Messrs. P. Lyall & Sons Construction Co., Limited, have the general contract for the re-erection of the premises of James Strachan, Limited. Plans are now being prepared.

Quebec, Que.

It is reported that Mr. B. Greenwood, acting on behalf of a New York Syndicate, has purchased from Le Syndicat Immobile, of this city, a site on which will be erected a \$200,000 theatre.

Sherbrooke, Que.

Work is about to start on the erection of an addition to the market buildings on King Street. A refrigerator plant will be installed.

The Canadian Box Mills are considering the erection of a plant at a cost of from \$10,000 to \$15,000 for buildings and equipment.

St. Charles River, Que.

The work on the new locks is going on apace, and the contractors, Messrs. Quinlan & Robertson, expect to complete the dam this season, thus permitting the new rail and highway bridges to be started next year.

Three Rivers, Que.

The Gres Falls Company have decided to rebuild their sawmill and mill for cutting up pulpwood, recently destroyed by fire.

SASKATCHEWAN.

Manor, Sask.

A grain elevator will be erected here by Messrs. Hogg & Lytle, Royal Bank Building, Toronto, with a capacity of about 30,000 bushels.

Prince Albert, Sask.

Disastrous bush fires have occurred in the neighborhood of Hudson Bay Junction and other timber limits have been destroyed.



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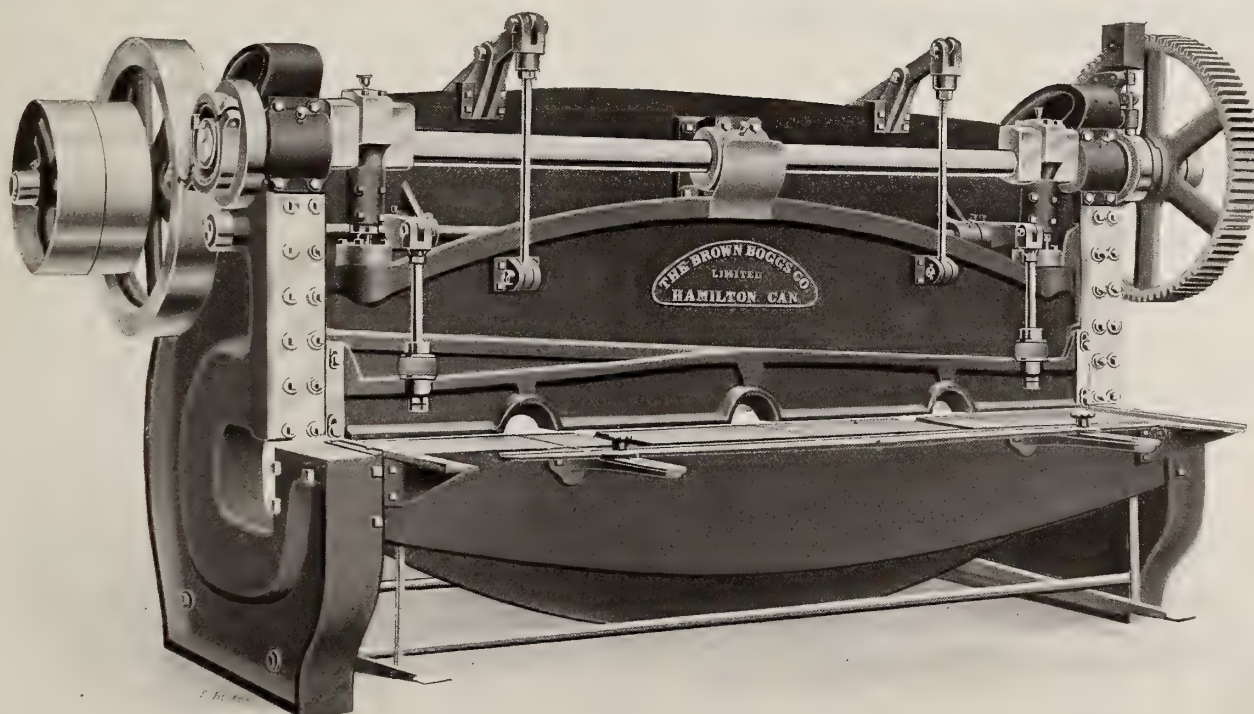
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CORRESPONDENCE INVITED.

CANADIAN OCEAN SAILINGS FOR JULY.

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, July 7; from Victoria, Makura, July 7.

British West Indies.

To Bermuda, St. Kitts, Antigua, Montserrat, Dominica, St. Lucia, St. Vincent, Barbados, Grenada, Trinidad and Demerara

—Royal Mail Steam Packet Company: From Halifax, Caraquet, July 2; from Halifax, Chignecto, July 30; from St. John, Chignecto, July 18.

To Bermuda, St. Kitts, Antigua, Barbados, Grenada, Trinidad and Demerara—Royal Mail Steam Packet Company: From St. John, Chaleur, July 4; from Halifax, Chaleur, July 16.

To Santiago, Cuba and Jamaica—Pickford & Black Line: From Halifax, Amanda, July 3.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, July 7; from Victoria, Makura, July 7.

Great Britain.

To Avonmouth—Dominion Line: From Montreal, Englishman, July 10.

To Liverpool—White Star-Dominion Line: From Montreal, Norsman, July 3; Megantic, July 10; Northland, July 24, Irishman, July 30.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, Makura, July 7; from Victoria, Makura, July 7.

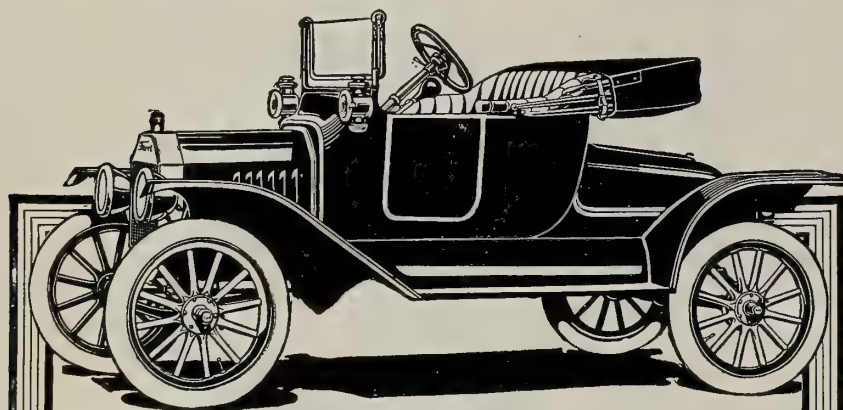
New Zealand.

To Auckland—Canadian Australasian Royal Mail Line: From Vancouver, Makura, July 7; from Victoria, Makura, July 7.

Australian New Zealand Service, Barber & Co., 17 Battery Place, New York, announce the inauguration of an Australian and New Zealand service, commencing with the S. S. Chalister (11,000 tons), now in New York loading and expected to sail about July 1st. This steamer calls at Wellington, Brisbane, Sydney, Melbourne and Port Adelaide.

It is the present intention to despatch a steamer about once a month, each of large capacity, and calling at ports to suit cargo. If sufficient cargo is available, the company will probably arrange for two sailings monthly to care for New Zealand separately from Australian ports.

The present schedule beyond the S. S. Chalister is as follows: S. S. Tellus, 12,800 tons, about Aug. 1st; S. S. Themis, 12,800 tons, about Sept. 1st.; S. S. Wagama, 8,500 tons, about Oct. 1st.; S. S. Storstad, 11,000 tons, about Nov. 1st.



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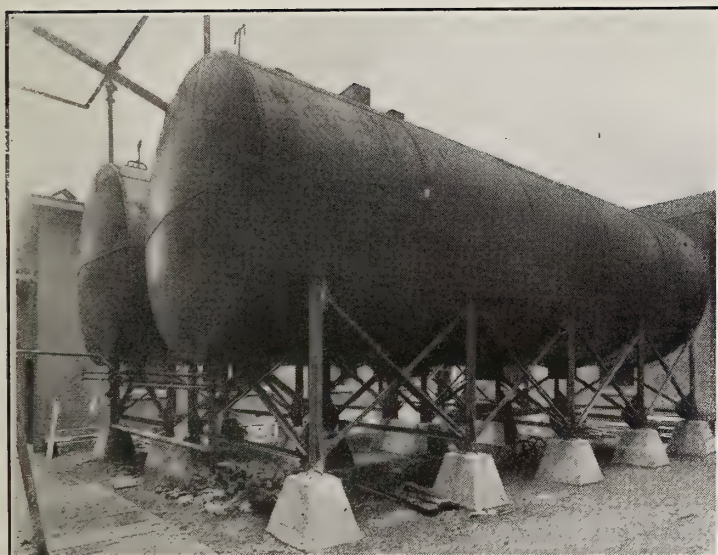
Touring Car \$590; Town Car \$840; F. O. B. Ford, Ontario, with all equipment, including electric headlights. Cars on display and sale at any Branch Manager—or write Ford Motor Company Ltd., Ford, Ont., for Catalogue I-1.



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TRADE OF NATAL.

The year 1914 promised to be, so far as the province of Natal was concerned considerably behind the previous year as regards the volume of imports. The railway strike, combined with the strike on the Rand, disorganized trade very considerably. For the first seven months, that is up to the outbreak of war, notwithstanding that 83 more vessels entered Union ports, the value of imports decreased by \$7,615,000, and for the whole year by \$28,405,000. For Durban alone the figures of import for the twelve months were as follows: \$56,030,000 in 1915, as against \$45,880,000 in 1914, a decrease of no less than \$10,150,000, or 18 per cent. It should also be remembered that goods cost more, and that therefore the decreased consumption in commodities should be estimated at about 20 per cent.

It should be mentioned that the share of the imports into South Africa taken by Durban, including the Chartered Company's territory, is almost 30 per cent., and \$7,500,000 higher than that of Port Elizabeth, which stands second on the list of South African ports.—*Trade and Commerce Report.*

CANADIAN TIMBER FOR ITALY.

A communication has been received from a firm in Milan which further amplifies the article appearing in Weekly Bulletin No. 583 on the possibilities for the importation of Canadian lumber into Italy. It is stated that the present is an opportune time to sell in Italy large quantities of deal-wood (spruce) from Canada. Generally speaking Italy receives large quantities of deals, in boards and planks as well as in logs, for sawing, from Austria-Hungary, Roumania, Germany, and Russia. On account of the present disturbed con-

ditions, however, Austria-Hungary and Germany have suspended their export of wood supplies to Italy, and Roumania and Russia from the commencement of the war have not been able to ship timber.

On account of the fact that Italy produces very little of this kind of wood, and as the consumption is large, the present time would seem to be favorable for an attempt to introduce Canadian timber into Italy. The most saleable quality would be the mercantile one, and the measurements would be as follows:—

Thickness.—from 12 millimetres (15.32 of an inch) and upwards, more especially 18 millimetres (23.32 of an inch) and 24 millimetres (15-16 of an inch).

Length.—Possibly 4 metres (13 feet 1½ inch), nevertheless greater lengths would be accepted.

Width.—From 10 centimetres to 18 centimetres (from 3 15-16 inches to 7 1-6 inches) and from 19 centimetres to 40 centimetres and upwards (from 7½ to 15¾ inches and upwards).

Any Canadian lumber manufacturers who wish to communicate to the Department of the firm in question on application to the Department of Trade and Commerce, Ottawa. (Refer file No. 1661.)

ACCIDENT PREVENTION AN INVESTMENT.

Accident prevention is a paying investment, according to statements by officials of the United States Steel Corporation. Approximately \$5,000,000 has been expended during the last eight years by the subsidiaries of the corporation in the installation of safety devices and the adoption of accident prevention measures.—*Safety Engineering.*

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BRITISH REQUIREMENTS FOR WIRE.

With further reference to the articles appearing in Weekly Bulletin Nos. 590 and 592 on the requirements for wire and wire netting in the United Kingdom, the Department of Trade and Commerce is in receipt of a communication from a firm in Great Britain who desire to represent Canadian manufacturers of wire and wire netting.

This firm states that the demand for wire netting in the United Kingdom greatly exceeds the supply, largely due to the stoppage of the imports of netting from Belgium and France. Germany, by arrangement with English netting manufacturers, did not export netting into Great Britain for the British home trade. In consideration of this agreement, the netting manufacturers in the United Kingdom purchased from Germany practically all of their annealed netting wire, in gauges ranging from 14½ to 22½ B.W.G., which was made into netting and galvanized in Great Britain. This supply being now cut off, the works in the country are unable to obtain even a small proportion of what is required. A famine practically exists in the United Kingdom for netting wire.

It is also stated that a large business could also be done in hairpin wire, which is a similar article, but drawn with a little more care with regard to roundness.

The firm in question state that if they could obtain from Canada hexagonal wire netting, galvanized after making, which is invariably the case in Great Britain, a very large quantity could be used, as there is an exceedingly large demand for the home and overseas trade.

Any Canadian manufacturers who are in a position to export wire or wire netting may obtain the name of the above firm on application to the Department of Trade and Commerce, Ottawa (refer File No. 1131).

WOOD PAVING BLOCKS.

From time to time Canadian manufacturers have looked into the feasibility of supplying wood paving blocks for the use of municipalities in the United Kingdom, and the existing situation has stimulated several recent inquiries regarding this trade. These have referred both to creosoted and uncreosoted blocks.

While some few municipalities might be willing to purchase untreated paving blocks from abroad, more particularly where such bodies do their own creosoting, there appears to be no possibility of shipping already-creosoted blocks to this country, if only for the reason that the nature and extent of the creosoting varies considerably according to the views of the different bodies and also to the particular variety of timber employed. An equally potent reason is that the majority of the municipalities obtain their supplies from resident manufacturers of blocks of all kinds, most of whom possess creosoting plants, and who are not only experts in everything that pertains to the industry, but keeping in constant touch with the engineers and other officials of public bodies, and carefully studying their wishes, form a convenient channel of supply with which non-resident block manufacturers would find it difficult to compete.

The majority of these manufacturers cut their own blocks besides attending to the creosoting process, but if sufficient inducement could be offered, it is possible that some of them might be willing to purchase the blocks already cut to dimensions.

It is, however, the opinion of those who have studied the trade, that Canada would stand a much better chance of supplying the timber than the finished block, and at the present time, when there is difficulty in obtaining supplies of practically all kinds of timber from customary sources, opportunities for Canadian trade are unusually favorable.

Kinds of Wood Required.

The most suitable woods are red pine, spruce, fir, and business might be possible in tamarack. The dimensions in greatest demand are: 3-inch by 8-inch, averaging 16-foot lengths; 3-inch by 9-inch, averaging 16-foot lengths. Although quotations fluctuate constantly, the selling price for such material at the present time is about £16 10s per standard of 1,920 board feet (Canadian measure), against an average price before the war of about £11 10s.

While certain of the block manufacturers might be prepared to purchase timber direct, as a rule they obtain their samples through the large wood brokers and agents who, under these circumstances, would be the best people for Canadian shippers to approach in the business.

Most of the large block makers have a knowledge of the qualities of Canadian timbers, but the present shortage of certain woods in principal use for block-making—notably red pine—affords a favorable opportunity for impressing upon both block manufacturers and users the equal suitability of particular Canadian timbers for the purpose.

FRUIT CROP.

There is every prospect of heavy crops of fruit of all kinds in the principal fruit-growing centres at prices which are likely to be well within the reach of the masses.

Already large supplies of gooseberries are on the market, and there is promise of a record yield of cherries.

Although it is still somewhat too early to speak definitely about apples, the blossom almost all over the country has been most profuse, and up to the present time the prospects for a heavy crop are favorable.—*Trade and Commerce Report.*

WHAT THE INSURED SHOULD KNOW.

According to the company paper of the Fireman's Fund, the fire insurance policyholder should know:

IN CASE OF.—Additional insurance, change of form, mortgage, vacancy, removal or repairs, it is necessary to have the agent approve the same by endorsement on the policy.

INSURANCE ON MERCHANDISE.—Does not cover furniture and fixtures; nor commission goods, or goods on storage, unless specifically mentioned.

TAKE AN INVENTORY.—At least once a year, and keep a merchandise account, showing all purchases and sales. In case of fire you must furnish proof of amount of loss.

DO NOT OVER-INSURE.—An insurance policy is not a check upon the company's treasury, but a bond intended to indemnify you against actual loss and under this bond actual cash values only are paid upon duly certified proofs of loss.

DURING A FIRE.—You are required to use your best efforts to protect your property. Your policy covers loss by fire and water damage, but not property stolen during removal.

ADJOINING FIRES.—Stock or furniture endangered by adjoining fires should be removed when the danger is imminent. Companies pay cost of removal and damages.

AFTER FIRE.—Call on agent with your policy and report loss; then act as you would if without insurance, i.e., protect the property, separate damaged goods from those not damaged and put property in best possible condition.

WHEN YOU INSURE.—Remember that your interests can be best protected by an agency which represents companies that are known for their square dealing and their financial strength.

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCOUNTING FORMS

- Business Systems, Ltd., Toronto.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS

- *The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL

- The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- *Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE

- E. L. Drewry, Winnipeg, Man.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS

- *Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS

- *The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS

- *T. Pringle & Sons, Montreal.

ASBESTOS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR

- Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES

- *Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
- *Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES,

- *Northern Electric Co., Limited, Montreal.
- *Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS

- *Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton

- Hamilton Cotton Co., Hamilton, Ont.

AWNINGS

- *Smart-Woods, Ltd., Montreal.

AXLES

- Canada Forge Co., Ltd., Welland, Ont.
- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Limited, Port Hope, Ont.

BAGS

- *The Canada Metal Co., Toronto.
- *Tallman Brass & Metal Co., Hamilton.

BAGS, Cotton

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal, Que.

BAGS, travelling

- Lamontagne, Ltd., Montreal, Que.

- The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN

- *Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:

- *Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS

- *The Geo. B. Meadows, Toronto

- Wire, Iron & Brass Works Co., Ltd., Toronto.

- *Canada Wire and Iron Works, Hamilton.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS and CAGES:

- *Canada Wire and Iron Goods Co., Hamilton.

- *Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS

- *Tallman Brass & Metal Co., Hamilton.

BARs, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARs, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Toronto.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- The Canadian National Carbon Co., Ltd., Toronto.

- Canadian Carbon Company, Ltd., Toronto.

BEARINGS:

- *The Chapman Double Ball Bearing Co., Ltd., Toronto.

- The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze

- *Tallman Brass & Metal Co., Hamilton, Ont.

- *Dodge Mfg. Co., Ltd., Toronto.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding

- *Otterville Mfg. Co., Ltd., Otterville, Ont.

- *Smart-Woods, Ltd., Montreal.

BEEF

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER

- E. L. Drewry, Winnipeg, Man.

BELTING, chains.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto.

- *J. L. Goodhue & Co., Danville, P.Q.

- *Sadler & Howarth, Montreal.

- *The D. K. McLaren Belting Co., Ltd., Montreal.

- *The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber, Limited.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES

- *Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS

- Samuel May & Co., Toronto.

BINDERS, loose leaf

- Business Systems, Ltd., Toronto.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:

- *A. C. Leslie & Co., Montreal.

BLANK BOOKS:

- Business Systems, Ltd., Toronto.

- *Morton, Phillips & Co., Montreal.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

- *Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS:

- *The Canadian Sirocco Co., Windsor, Ont.

- *Sheldons, Ltd., Galt.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS

- *Canadian H. W. Johns-Manville Co., Toronto.

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.

- *M. Beatty & Sons, Ltd., Welland, Ont.

- *Goldie & McCulloch Co., Ltd., Galt, Ont.

- John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

- *Polson Iron Works, Ltd., Toronto

- *J. & R. Weir, Montreal, Que.

- Taylor-Forbes Co., Ltd., Guelph, Ont.

- *Jenckes Machine Co., Sherbrooke

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, heating:

- *The Goldie & McCulloch Co., Ltd., Galt.

BOILERS, hot water or steam

- Warden King, Ltd., Montreal, Que.

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- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

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- Warden King, Ltd., Montreal, Que.

- *The Watrous Engine Works Co., Ltd., Brantford.

- BOILERS, steam and brass work

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

BOILER STANDS

- Anthes Foundry Ltd., Toronto.

BOLSTERS

- *Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:

- *The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.

- *The Steel Co. of Canada, Ltd., Hamilton.

- *Starr Mfg. Co., Ltd., Dartmouth, N.S.

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- R. G. McLean, Toronto.

- *The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS

- Stone Limited, Toronto.

- R. G. McLean, Toronto.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

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- Ames-Holden-McCreedy, Ltd., Montreal, Que.

- J. Leckie Co., Ltd.

- The John Ritchie Co., Ltd., Quebec, Que.

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- Samuel May & Co., Toronto.

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- *The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

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- The Arlington Co. of Canada, Ltd., Toronto.

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- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden

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- Barchard & Co., Ltd., Toronto.

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- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS

- *Tallman Brass & Metal Co., Hamilton.

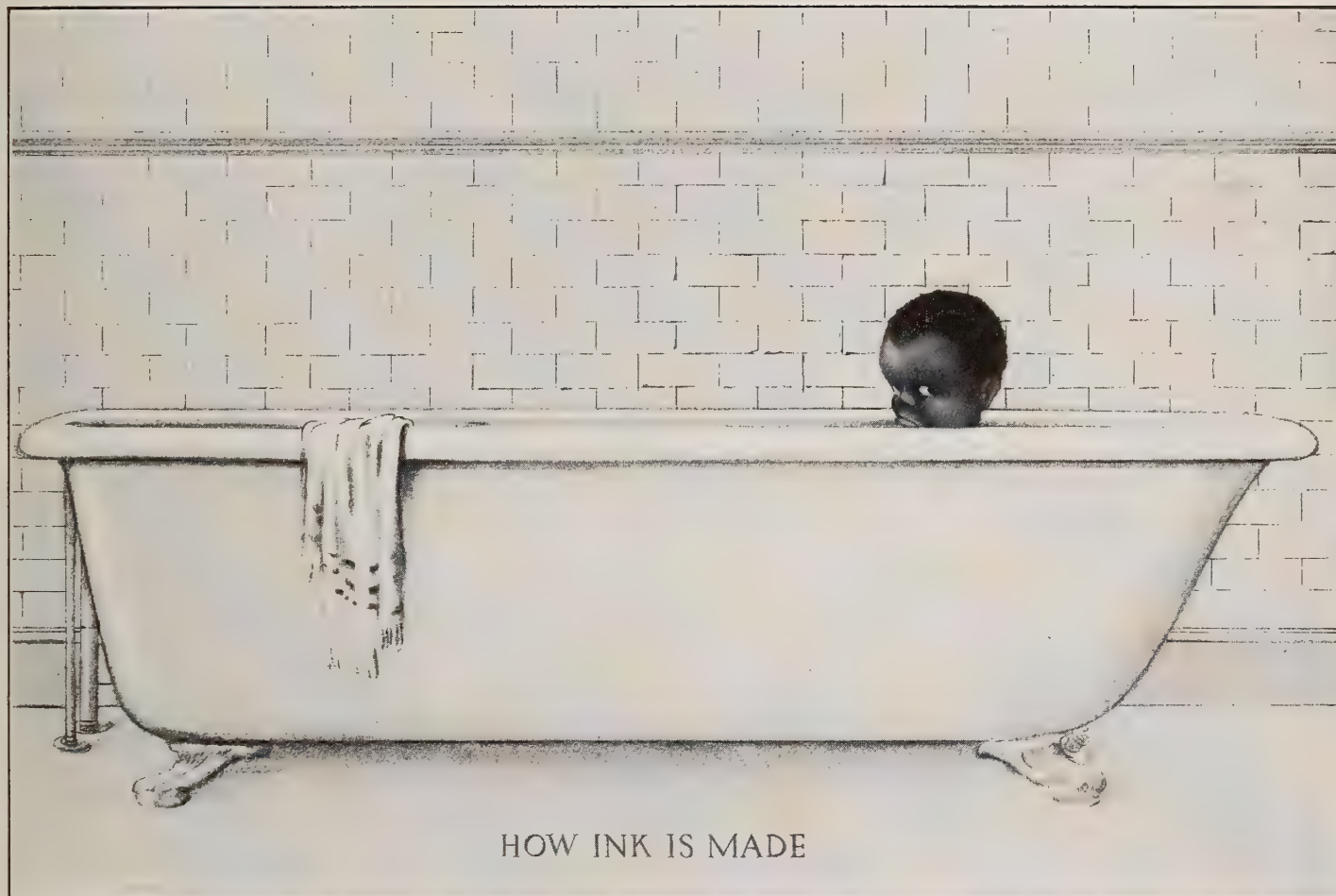
- BRASS, BRONZE and ALUMINUM LETTERS

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*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Watrous Engine Works Co., Ltd., Brantford.

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Port Credit Brick Co., Port Credit, Ont.

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National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer

National Brick Co. of Laprairie, Laprairie, P.Q.

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*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

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*The Bawden Machine Co., Limited, Toronto.

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Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

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Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

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Canadian National Carbon Co., Ltd., Toronto.

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*The General Fire Equipment Co., Ltd., Toronto, Ont.

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Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

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Standard Clay Products, Ltd., St. Johns, Que.

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*Northern Electric Co., Limited, Montreal.

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American Can Co., Montreal and Hamilton.

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*Richard-Wilcox Canadian Co., Limited, London, Ont.

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Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

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Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

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*Canadian Car & Foundry Co., Ltd., Montreal, Que.

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*Sheldons, Ltd., Galt.

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Harris Lithographing Co., Toronto.

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*Tallman Brass & Metal Co., Hamilton.

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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

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*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

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The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

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*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

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*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
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The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

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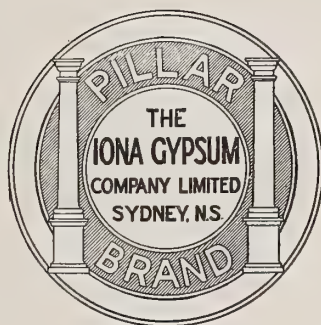
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ELECTROTYPING

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*Canada Wire and Iron Works, Hamilton.

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| Vancouver, B.C.—St. Andrew's Presbyterian Church | Ottawa, Ont.—St. Andrew's Church |
| Vancouver, B.C.—First Congregational Church | Montreal, Que.—Notre Dame Church |
| Nelson, B.C.—Methodist Church | Montreal, Que.—St. George's Church (Church of England) |
| Calgary, Alta.—Knox Presbyterian Church | Montreal, Que.—Emmanuel Congregational Church |
| Edmonton, Alta.—First Presbyterian Church | Quebec, Que.—Holy Trinity Cathedral |
| Saskatoon, Alta.—Knox Church | Quebec, Que.—Chalmers' Church |
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While intended at first for State property only, the scheme

was afterward extended to include county and municipal property.

The present condition of the State Fund was recently animadverted upon by the Governor of the State. He stated that the fund had on hand only a little over \$12,000 and owed the State \$78,180. This showing after ten years' experience demonstrated, he said, that State insurance on that basis was a failure, and he recommended that more reliable insurance be substituted for it.

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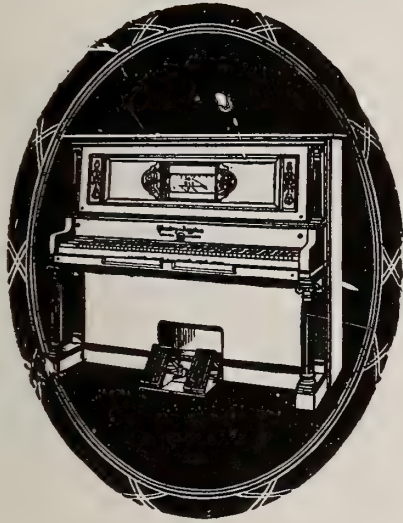
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*The Steel Co. of Canada, Ltd., Hamilton.

STEEL SASH:

*Dennis Wire & Iron Works, Co., London.

*Henry Hope & Sons, Ltd., Toronto.

STEEL SHELVING:

*Dennis Wire & Iron Works, Co., London.

TELEPHONE ACCESSORIES,

*Northern Electric Co., Limited, Montreal.

STENCILS, brass

Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING

Central Press Agency, Toronto.

STOKERS,

*The Jones Underfeed Stoker Co., Ltd., Toronto.

STOOLS AND BENCHES, piano and organ

*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE

The Corinthian Stone Co., Guelph, Ont.

The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS

The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES

Tudhope-Anderson Co., Ltd., Orillia, Ont.

Bedford Stove Co., Bedford, Que.

STOVE BOARDS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS

Standard Clay Products, Ltd., St. Johns, Que.

STOVES AND RANGES

Bedford Stove Co., Bedford, Que.

Gurney Foundry Co., Ltd., Toronto.

Lee Mfg. Co., Ltd., Pembroke, Ont.

The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain

*Otterville Mfg. Co., Ltd., Otter-

STRUCTURAL STEEL

Dominion Bridge Co., Montreal.

*Hamilton Bridge Works Co., Ltd., Hamilton.

*The Canadian Bridge Co., Ltd., Walkerville, Ont.

*The Structural Steel Co., Ltd., Montreal.

SUIT CASES

J. Eveleigh & Co., Ltd., Montreal.

The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:

*Berlin Machine Works, Ltd., Hamilton.

SWITCHBOARDS

*The Canadian Independent Telephone Co., Ltd., Toronto.

SWITCHES, railway

Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS

*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS

*Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

TABLES, billiard

Samuel May & Co., Toronto.

TABLE COVERS, chenille

Hamilton Cotton Co., Hamilton Ont.

TAGS, shipping and factory

Business Systems, Ltd., Toronto.

TANKS

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto.

*The Goldie & McCullough Co., Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

TAPS

Pratt and Whitney Co. of Canada, Dundas, Ont.

*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES

*Butterfield & Co., Rock Island, P.Q.

TAPES, measuring

The Lufkin Rule Co., of Canada, Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed

Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES

Canadian Independent Telephone Co., Toronto.

*Northern Electric Co., Limited, Montreal, Que.

TELEPHONE APPARATUS

*The Canadian Independent Telephone Co., Ltd., Toronto.

TELEPHONES, Automatic

*Canadian Independent Telephone Co., Toronto.

TENTS

Mackenzie & Co., Ottawa, Canada.

Turner, J. J., & Sons, Peterborough, Ont.

*Scythes & Co., Ltd., Toronto.

TERRA ALBA

*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA (architectural)

Toronto Plate Glass Importing Co., Ltd., Toronto.

THEATRE CURTAINS, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:

*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.

Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Ltd.

TIMBER:

*The B.C. Mills Timber & Trading Co., Vancouver, B.C.

James Sheppard & Son, Sorel, Que.

TANNERS' SUPPLIES

McClary Mfg. Co., London, Ont.

TIN WARE (stamped, pierced, japanned and lithographed)

Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.

Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Ltd.

TRADE MARKS AND DESIGNS

Ridout & Maybee, Toronto.

TRANSFORMERS

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TRANSFORMERS, power

*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing

*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, sheet metal workers

Brown Boggs Co., Ltd., Hamilton, Ont.

TOOLS, track

B. J. Coghlin Co., Ltd., Hamilton, Ont.

TRANSMISSION MACHINERY.

*Dodge Mfg. Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Watrous Engine Works Co., Ltd., Brantford.

TROLLEYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS

The Gurney Scale Co., Hamilton, Ont.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber

*Watrous Engine Works Co., Ltd., Brantford.

TRUNKS

Lamontagne Ltd., Montreal, Que.

J. Eveleigh & Co., Ltd., Montreal, Que.

The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

Canadian Seamless Wire Co., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

TUBING, Gold and Silver

Canadian Seamless Wire Co., Toronto.

TURBINES, water.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TURBINES, steam:

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TURBINE AND RECIPROCATING PUMPS.

*The Bawden Machine Co., Limited, Toronto.

TWEEDS

Rosamond Woollen Co., Almonte, Ont.

TWINES, binder

Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS

Pratt and Whitney Co., of Canada, Dundas, Ont.

*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

UNDERWEAR

Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial

Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS

*Dart Union Co., Ltd., Toronto, Ont.

*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS

The Whitby Braid & Edging Co., Woodstock, Ont.

UPHOLSTERED FURNITURE, leather and tapestries

Imperial Rattan Co., Ltd.

VACUUM PUMPS

*The Bawden Machine Co., Limited, Toronto.

VALVES:

*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water

Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.

Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES

*Ault & Wiborg Co. of Canada, Ltd., Toronto.

Berry Bros., Walkerville, Ont.

*Dougall Varnish Co., Ltd., Montreal.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:

*The Goldie & McCullough Co., Ltd., Galt.

VENTILATING APPLIANCES:

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

*Sheldons, Ltd., Galt.

VENTILATING SYSTEMS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

Gurney Foundry Co., Ltd., Toronto.

VENTILATORS:

*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

*Pedlar People, Ltd., Oshawa, Ont.

VINEGAR

The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

WAGONS

Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL BOARD

*Bird & Son, Hamilton, Ont.

WALL COPING

Standard Clay Products, Ltd., St. Johns, Que.

WASHERS:

*The Steel Co. of Canada, Ltd., Hamilton.

WASHERS, plate or wrought

London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton

Factory Waste and Metal Co., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

WATER-PROOF CEMENT COATING

Benjamin Moore & Co., Ltd., Toronto.

WAXED PAPER

Business Systems, Ltd., Toronto.

WEBBING, elastic

Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic

Hamilton Cotton Co., Hamilton, Ont.

WHEELS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

WHEELS, corundum

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel

*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, turbine, water.

*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

WELL DRILLING TOOLS AND MACHINERY
Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES
Lay Whip Co., Rock Island, Que.

WHISKIES
H. W. Nelson & Co., Toronto.

WHISKY
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL
*Berry Bros., Ltd., Winnipeg.

WHITE LEAD
Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.

WINDMILLS
*Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.

WINDOW SHADES
Daly & Morin, Montreal, Que.

WIRE
*Canada Wire & Iron Goods Co., Hamilton.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
The Graham Nail Works, Toronto

WIRE CLOTH
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:
*Metallic Roofing Co., Ltd., Toronto.

WIRE GUARDS
*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, Insulated Electric,
*Northern Electric Co., Limited, Montreal.

WIRE, insulated electric:
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE
The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

WIRE, Weatherproof:
*Northern Electric Co., Limited, Montreal.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK
C. H. Johnston & Sons, Ltd., Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

WOOD
Standard Fuel Co., Toronto.

WOOD PRINTERS
Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical
La Cie de Puipe de Chicoutimi, Chicoutimi, Que.

WOOD SPLIT PULLEYS.
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOL
*H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS
Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.
*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:
*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton
Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical
*The Canada Metal Co., Toronto.

* For Display Advertisement See Index Page 434

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.
SHEETS TUBES COPPER & BRASS AND RODS
SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT
115-121 SUMACH STREET
TORONTO, CANADA

ESTABLISHED 1875

The Boiler Inspection and Insurance Co. of Canada

Continental Life Building, Toronto

Issues Policies of Insurance after
A CAREFUL INSPECTION OF
THE BOILERS Covering LOSS
OR DAMAGE TO PROPERTY
and LOSS RESULTING FROM
LOSS OF LIFE AND PERSONAL
INJURIES. :: :: :: ::

Policies Guaranteed by THE
HARTFORD STEAM BOILER
INSPECTION AND INSURANCE
COMPANY. :: :: ::

Assets for Security of Policy-
holders, \$4,552,020.43. :: ::

JOHN L. BLAIKIE - - - President
H. N. ROBERTS - Vice-President and Sec'y
GEO. C. ROBB - - - Chief Engineer
A. E. EDKINS - - - Ass't Chief Engineer

SERVICE FIRST

"BEATTY"

Material Handling Plant

Has Constant Service built right into it.

We have successfully met the growing demands of the contracting business for Fifty Years, and our reputation is based on the Service idea.

WE MAKE

Hoisting Engines, Dipper Dredges, Clamshell Dredges, Steel Scows, Dump Scows, Drill Boats Steel Derricks, Derrick Irons, Pile Drivers, Centrifugal Pumps and the "FAIVRETTE" CLAM BUCKET.

M. Beatty & Sons, Limited

MAIN OFFICE AND WORKS: Welland, Ont.

TORONTO BRANCH: 4th Floor, 154 Simcoe Street

AGENTS:

H. E. Plant, 1790 St. James St., Montreal
E. Leonard & Sons, St. John, N.B.
Robt. Hamilton & Co., Vancouver, B.C.
Kelley-Powell Limited, McArthur Bldg., Winnipeg

INDUSTRIAL CANADA



WHAT ARE YOU GETTING FOR YOUR MONEY?

A PLAIN TALK TO MANUFACTURERS WHO SPEND
\$1,000 TO \$3,000 PER YEAR FOR ADVERTISING

WE are continually meeting manufacturers who say they don't do enough advertising to justify employing our organization to take care of it. Yet these same manufacturers' appropriations average \$2,000 a year.

Some even reply to our solicitation with the statement "We do not do any advertising," when we have in our pocket an advertisement of that particular firm clipped from a current magazine or newspaper.

To be facetious, one might reply "What do you call advertising, anyway? Is your advertisement in such and such a paper put there for tribute or do you expect to get business by it?"

The fact of the matter is, every manufacturer does some kind of advertising, although many of them regard their trade paper and directory advertisements as a contribution for the good of the cause.

But it is a pity to see thousands of dollars frittered away every month in the purchase of aimless publicity, when that same amount of money intelligently spent would create business and return a profit upon the investment.

We have recently persuaded a number of manufacturers, who have hitherto regarded their advertising with almost indifference, to put their appropriations on a business basis and accept our advice upon ways and means of spending the money.

Are you willing to consider a proposal from us?

We can show a man with a thousand or more active prospective customers how, for the sum of about ten cents per month per customer, he can do really effective advertising and help stir up business amongst men who are likely to be wallowing in the slough of despondent inertia, if they are not lifted out of the rut pretty soon.

Write for further particulars to

J. J. GIBBONS, LIMITED

AGENTS FOR ADVERTISERS

Tribune Building
WINNIPEG

119 West Wellington Street
TORONTO

Coronation Building
MONTREAL

**PUBLISHED BY THE CANADIAN
MANUFACTURERS ASSOCIATION** INCORPORATED.

HEAD OFFICE BRANCH OFFICES,
• TORONTO • MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC.

MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

Automobile Parts

Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED

Walkerville, Ont.



"Giving Satisfaction"

This is the true measure of a manufacturer's service to his constituency. It has been our constant aim since we commenced to do business eight years ago. Our large and rapidly expanding trade is proof that our products and our methods of doing business appeal to our customers.

The greatest possible care and attention are given at our Refinery to the manufacture of the different lines—the highest obtainable quality being our goal. The statement "WE MAKE THAT GOOD OIL" has now passed into a proverb as referring to the products of The British American Oil Co.

We guarantee every gallon of British "Peerless" and Motor Gasolene, Benzine, Lamp Oil, Lubricating Oil, "Ford Motor Oil," "Autolene" for other motors, Fuel Oil, Road Oil and other Products.

We are prepared to live up to the guarantee that if any of our goods are not as represented they may be returned at our expense and money will be refunded if already paid for same. In no case will we allow a customer to make a loss on account of our products not being equal to representation.

We make our products as good as we know how and have justifiable confidence in them. Our customers have a right to demand value for their money and we see that they get it. We do not pose as philanthropists; this is pure business.

Our watchword is "GIVING SATISFACTION."

The BRITISH AMERICAN OIL CO., Limited

REFINERS, FOOT OF CHERRY STREET, TORONTO

Head Office: LUMSDEN BUILDING, TORONTO

Branches: MONTREAL, OTTAWA, LONDON, WINDSOR



Union Pipe Couplings

Will save you money. Will save you time.

Will save you annoyance. Will save you loss.

Are you willing?

Your jobber sells them.

DART UNION CO., LTD., TORONTO

CONTENTS

	Page		Page
Editorials	469	Insurance	485
Canada's Finest Dry Dock	474	Tariff	486
BY NORMAN LAMBERT.		BY J. R. K. BRISTOL.	
Industry and Art	477	Legislation	487
BY ROBERT MACKAY FRIPP, L.A.C., F.S.A.		BY F. W. WEGENAST.	
Honor Roll	481	Trade Opportunities in Russia	490
Central Technical School of Toronto	482	Trade Enquiries	500
BY DR. ALEXANDER MacKAY.		Among the Industries	508
Transportation	484	Buyers Guide	514
BY J. E. WALSH.			

INDEX TO DISPLAY ADVERTISEMENTS

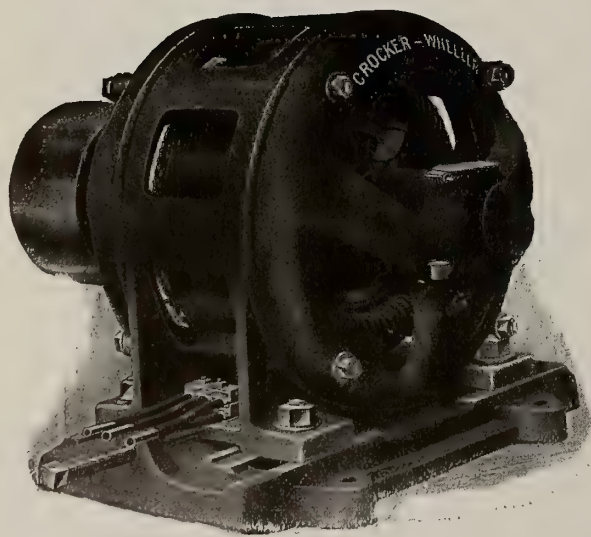
Albert Mfg. Co.....	448	Brown Bros., Limited	502	Canadian Sirocco Co., Limited.....	462
Andrews, H. V.	501	Butterfield & Co.	459	Canadian Street Car Advertising Co., Limited	437
Armstrong Whitworth Co. of Canada, Ltd.: ..	443	Canada Carbide Co., Limited.....	455	Canadian Tube & Iron Co., Limited.....	457
Banfield, W. H., & Sons.....	510	Canada Metal Co., Limited	443	Canadian Westinghouse Co., Limited.....	467
Beatty, M., & Sons, Limited.....	522	Canada Wire & Iron Goods Co.....	447	Canadian Winkley Co., Limited.....	508
Berlin Machine Works	440	Canadian Appraisal Co., Limited, The.....	493	Chapman Double Ball Bearing Co. of Canada, Limited	466
Berry Bros.	447	Canadian Bank of Commerce.....	498	Chicago Bridge & Iron Works.....	496
Bertram, John, & Sons, Limited.....	441	Canadian Billings & Spencer Co., Ltd....	454	Clarke, A. R., & Co., Limited.....	448
Beveridge Paper Co., Limited	501	Canadian Bridge Co., Limited.....	456	Conduits Co., Limited	513
Bird & Son	495	Canadian Car & Foundry Co., Limited.....	458	Consolidated Mining & Smelting Co. of Canada, Limited, The	507
Boiler Inspection and Insurance Co. of Canada	460	Canadian Consolidated Rubber Co., Ltd....	459		
Boiler Inspection Department, Ontario Government	496	Canadian Crocker-Wheeler Co., Limited.....	436	Dart Union Co., Ltd.	435
Booth-Coulter Copper & Brass Co., Ltd., The	522	Canadian Drawn Steel Co., Limited.....	511	Delaney and Pettit, Ltd.	501
Bradstreets	504	Canadian Hart Wheels, Limited.....	506	Dennis Wire & Iron Works Co., Ltd.	496
British American Oil Co., Limited		Canadian H. W. Johns-Manville Co., Limited	445	Dodge Mfg. Co., Limited.....	450
Inside Front Cover		Canadian Oil Companies, Limited	522	Dominion Abrasive Wheel Co., Limited....	496
		Canadian Pacific Railway Co.	499	Dominion Belting Co.	504

(Continued on next page.)

INDEX TO DISPLAY ADVERTISEMENTS—Continued

Dominion Bridge Co., Limited..... 456	Jeffrey Manufacturing Co. 459	Ontario Government Notices 461
Dominion Stamping Co., Limited Inside Front Cover	Jenckes Machine Co., Limited..... 454	Ontario Wind Engine & Pump Co., Ltd.... 463
Dominion Steel Foundry Co., Ltd..... 501	Jones, J. L., Engraving Co., Limited..... 513	Otterville Mfg. Co., Limited 511
Dougall Varnish Co. Inside Back Cover	Jones & Moore Electric Co., Limited..... 443	Page Wire Fence Co., Limited..... 454
Doon Twines, Ltd. 490c	Jones Underfeed Stoker Co., Limited..... 494	Paterson Mfg. Co., The, Limited 468
Du Pont Fabrikoid Co. 455	Kennedy, Wm., & Sons, Ltd. 457	Penman's Limited 459
Eddy, E. B., Co., The 452	Kerr Engine Co., Limited, The..... 461	Polson Iron Works, Limited 460
Edward Partington Paper & Pulp Co.... 464	London & Lancashire Fire Insurance Co., Limited 510	Pratt & Letchworth Co., Limited..... Inside Front Cover
Elder Dempster & Co., Limited..... 500	Lysaght, John, Limited..... Inside Back Cover	Preston Wood Working Machinery Co. ... 490a
Eureka Mineral Wool & Asbestos Co..... 461	Macdonald Mfg. Co. Ltd. 505	Purdy, Mansell, Limited 510
Evans, William H. 490b	Martin Corrugated Paper & Box Co., Ltd.. 464	Richards Wilcox Canadian Co., Ltd..... 511
Galt Malleable Iron Co., Limited 494	Massey-Harris Co., Limited..... 449	Riordan Paper Co., Limited 445
Gardner, R. & Son, Ltd. 506	McClary Mfg. Co. 490c	Ritchie & Ramsay 451
Garlock Packing Co. 497	McKenzie, The D., Machinery Co. 439	Rolland Paper Co., Limited, The 445
General Fire Equipment Co., Limited..... 512	McLaren, D. K., Limited 503	Royal Bank of Canada 498
Gibbons, J. J., Limited.... Outside Front Cover	McLaren, J. C., Belting Co., Limited..... 503	Russell Motor Car Co., Limited..... 451
Goderich Organ Co., Limited, The..... 511	Meadows, The G. B., Iron & Brass Works Co., Limited 439	Sadler & Haworth 449
Goldie & McCulloch Co., Limited, The.... 442	Metallic Roofing Co., Limited..... 495	Scythes & Company, Ltd. 493
Goodhue, J. L., & Co., Limited 503	Montreal Cotton, Ltd. 490c	Sheldons, Limited 466
Gould, Shapley & Muir Co., Limited..... 502	Montreal Lithographing Co., Limited..... 461	Steel Co. of Canada, Limited, The..... 446
Gourlay, Winter & Leeming 505	Montreal Locomotive Works, Limited.... 465	Structural Steel Co., Limited 456
Grasselli Chemical Co., Limited..... 453	Morrow, John, Screw & Nut Co., Ltd.... 507	Tallman Brass & Metal Co. 463 and 465
Greening, The B., Wire Co., Limited..... 453	Morton, Phillips & Co. 504	Thomson, Tilley & Johnston..... 454
Gutta Percha & Rubber Manufacturing Co., of Toronto, Limited.... Inside Back Cover	National Acme Manufacturing Co., The.... 438	Thompson & Norris Co. of Canada, Limited Outside Back Cover
Hamilton Bridge Works Co., Limited..... 456	New Zealand Shipping Co., Limited..... 500	Toronto Hydro-Electric System 489
Hinde & Dauch Paper Co. of Canada, Limited, The 462	Nichols Chemical Co., Limited, The..... 443	Trussed Concrete Steel Co. of Canada, Ltd. 452
Howard Smith Paper Mills, Limited..... 463	Nicholson File Co. 460	Union Drawn Steel Co., Limited..... 511
Imperial Oil Co., Limited..... 447	Northern Aluminum Co., Limited..... 513	Victor Saw Works, Limited..... 455
Inglis, John, Engine Co., Limited..... 444	Northern Electric Co., Limited..... 495	Vogel, H. G., Co. of Canada, Limited.... 512
International Time Recording Co., Ltd. .. 491	Nova Scotia Steel & Coal Co., Limited.... 465	Walker, Hiram, & Sons, Limited 509

FOR BUYERS' GUIDE, SEE PAGE 514.



THE DESIGN OF CROCKER-WHEELER INDUCTION MOTORS

INCLUDES :

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features;
Bulletin 155 describes them.

THE CANADIAN CROCKER - WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works : St. Catharines

District Offices : Montreal, Toronto, Vancouver

We Have Prepared the Way

WE HAVE SPENT thousands of dollars on Street Car patrons impressing on them the advantages of purchasing "Made-in-Canada" Products.

We were the first in the field with a "Made-in-Canada" campaign, prepared, placed and carried out entirely at our own expense, for the benefit of Canadian Street Car advertisers.

Canadian Manufacturers

who use Street Car advertising get the direct benefit of all the money we have spent, in addition to getting the greatest possible amount of the best advertising for every dollar of their own they spend on Street Car space.

There are 1,735,685 passengers carried daily on the street car lines we control throughout Canada, and with these we have prepared the way for "Made-in-Canada" campaigns.

They are ready to purchase goods made in Canada, but they have to be told what goods are made here.

At a cost of only One Dollar you can reach over 48,000 of these consumers through an advertisement in the Street Cars.

Let us tell you more about it. Any of our offices will respond promptly to a request for information.

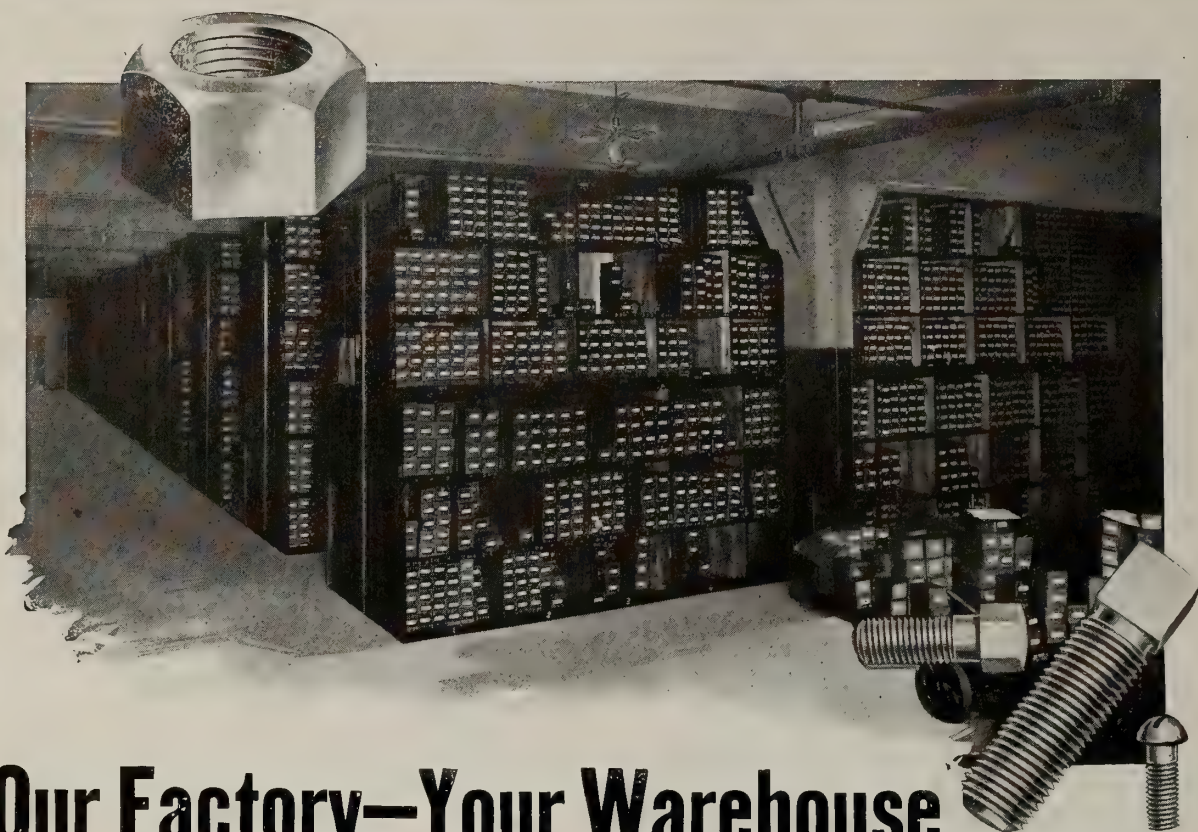
The
Canadian Street Car Advertising Company

Limited

MONTREAL

TORONTO

WINNIPEG



Our Factory—Your Warehouse For Standard Screws, Nuts and Studs

We are able to furnish standard products at any time, in any style and size, packaged or bulk just as you want them.

Screws—Cap and Set—V, U. S. Standard Thread and S. A. E. Standard Steel Screws.

Nuts—Plain, S. A. E. or V. Thread Castellated, S.A.E. Thread and Hexagon Brass Nuts.

Studs—V. Thread. Any Style Standard Products not listed will be made promptly to order.



The "Milled Products" list is a buyer's catalog of standard parts. It will be mailed on request.

Special screw cutting of the highest quality in sizes up to 2½ in. diameter and 10½ in. length. Estimates from a sample or blue-print.

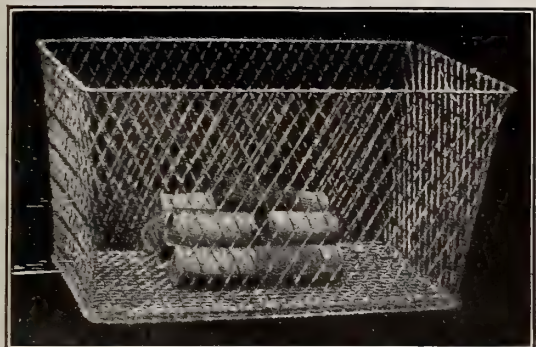
The National-Acme Manufacturing Co.

Montreal, P.Q.

In St. Henri at G.T.R.

WIRE BASKETS

FOR ALL INDUSTRIAL USES



In Ordering Specify

1. Shape and Dimensions
2. Size of Mesh
3. Gauge of Wire
4. Style of Handles
5. Whether to be Tinned Galvanized or Painted



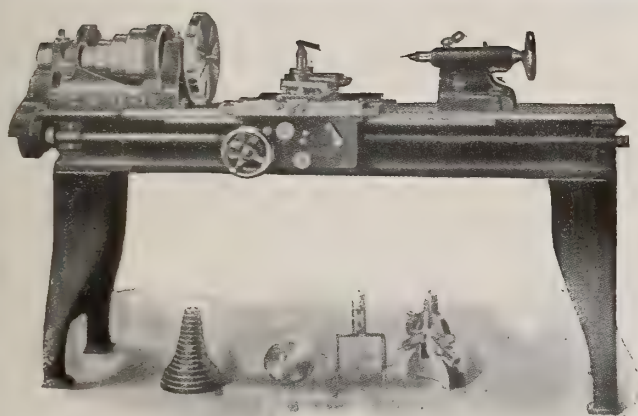
Send for our Catalogue No. 7 of Wire Work

The GEO. B. MEADOWS

Toronto Wire, Iron & Brass Works Co., Limited

MEADOWS BLOCK

TORONTO, CAN.



14 IN. x 6 FT. ENGINE LATHE

THIS is a Lathe made from new patterns, of improved design, and of the best material.

SPINDLE OF HIGH CARBON HAMMERED STEEL

GEAR FEEDS

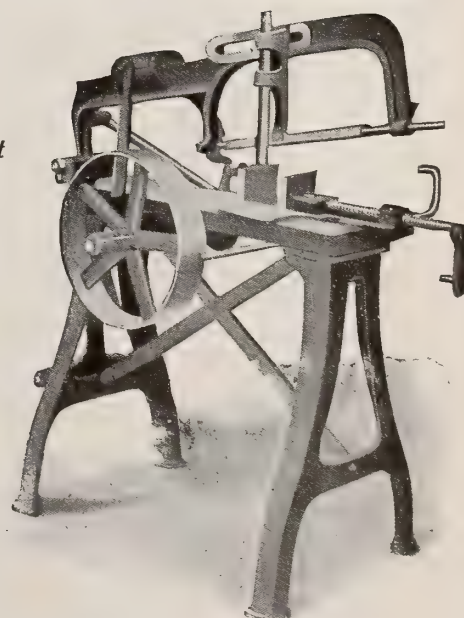
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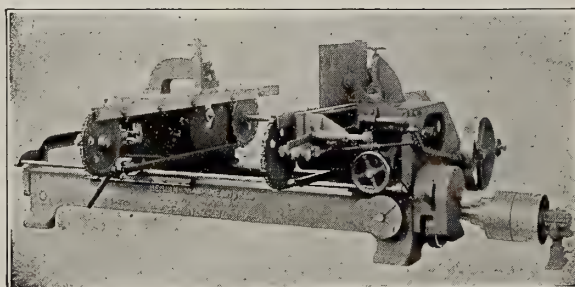
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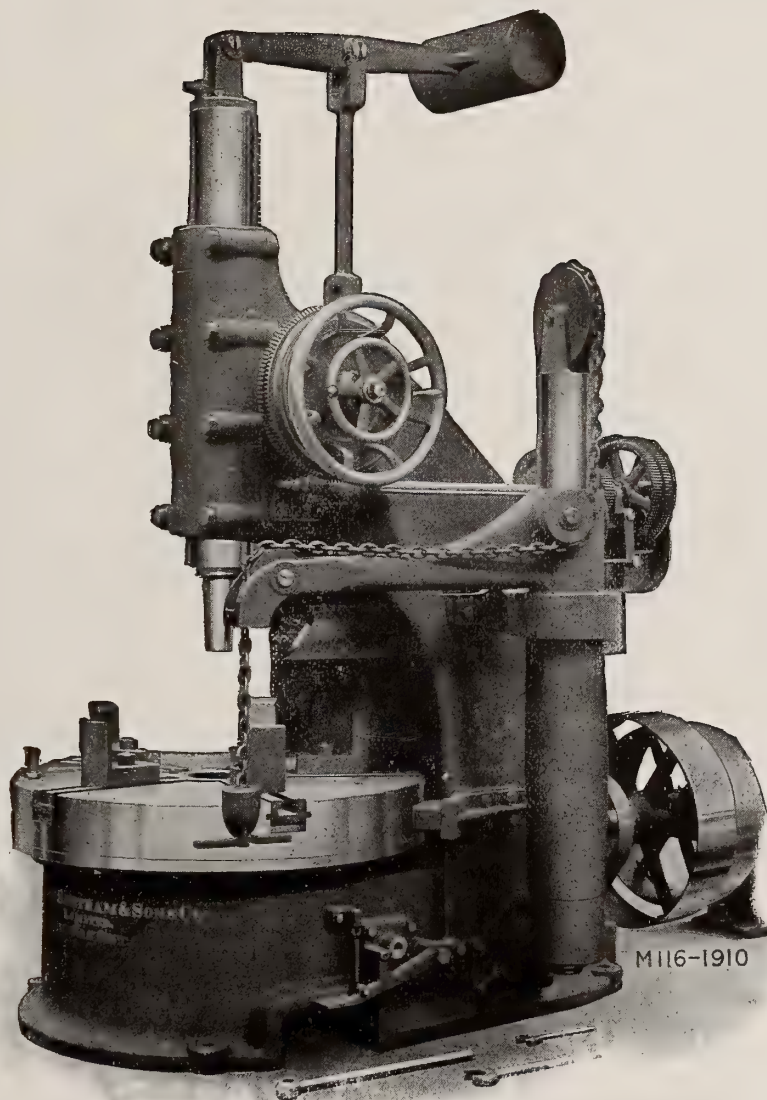
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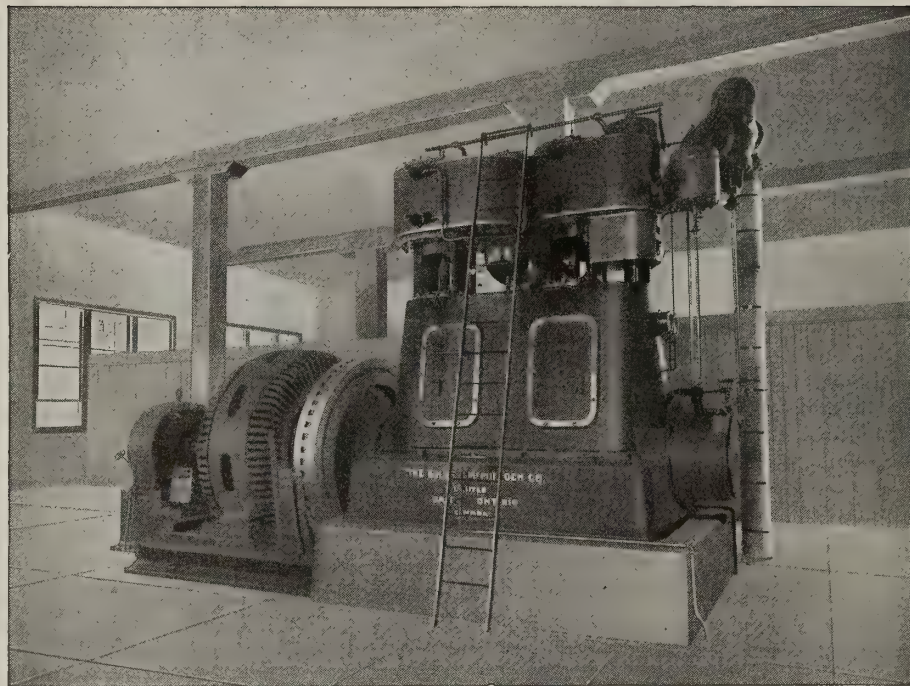
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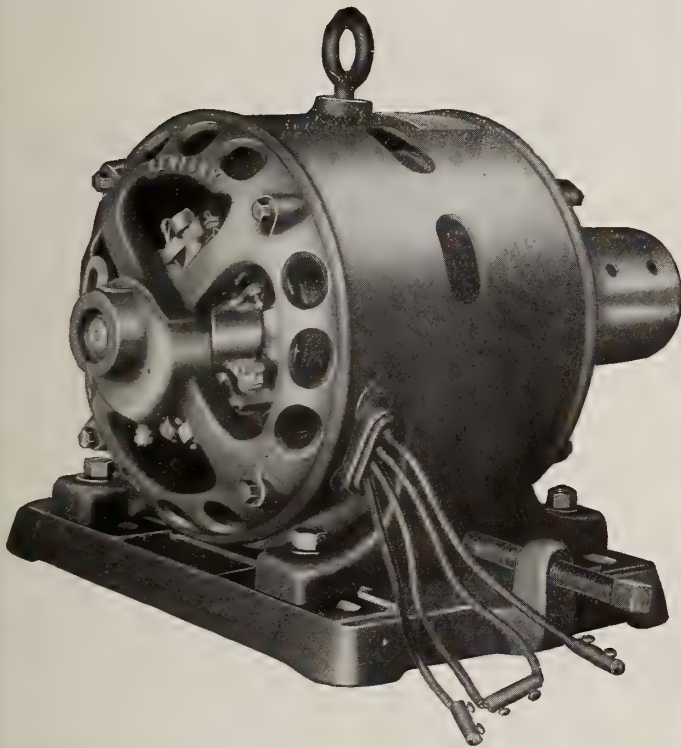
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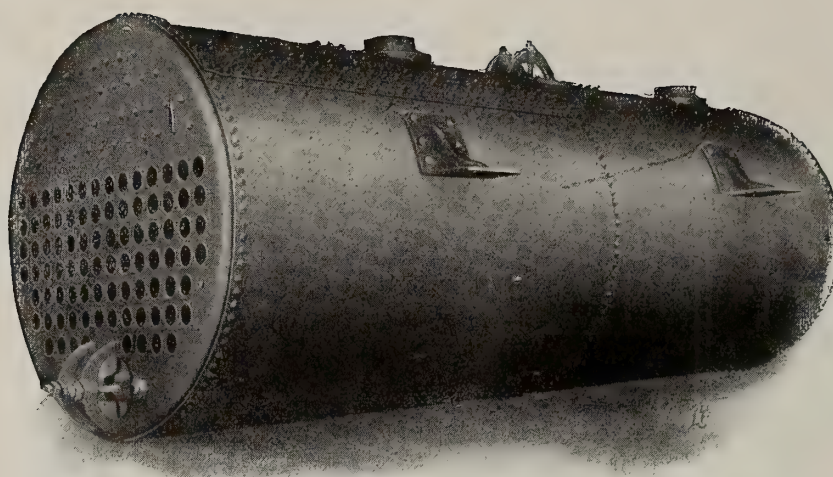
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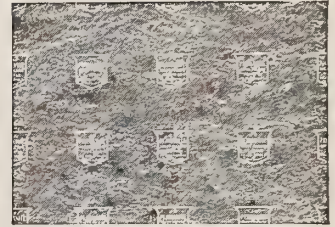
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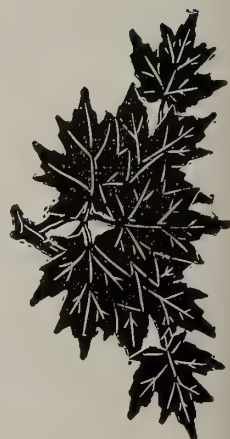


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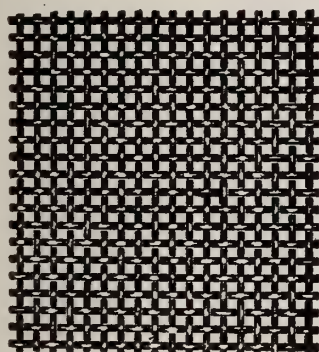


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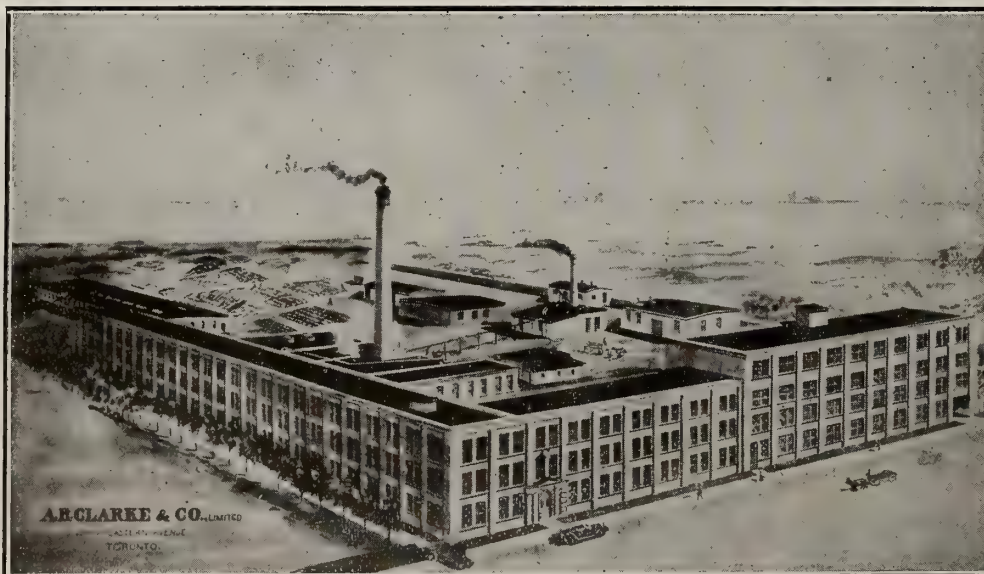
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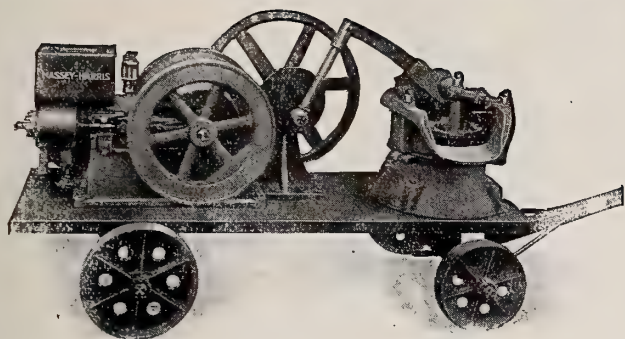
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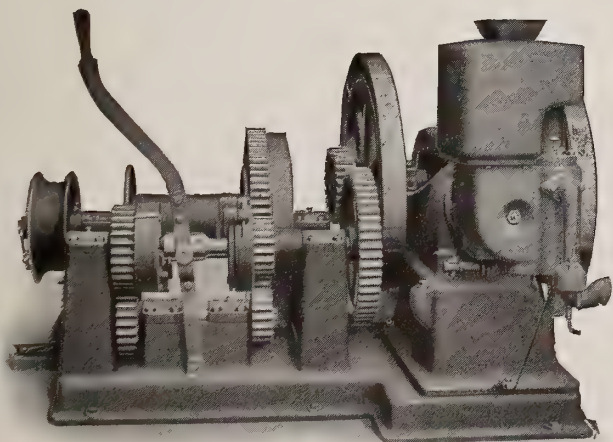
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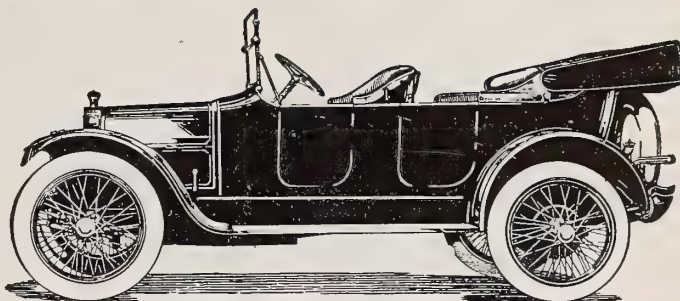
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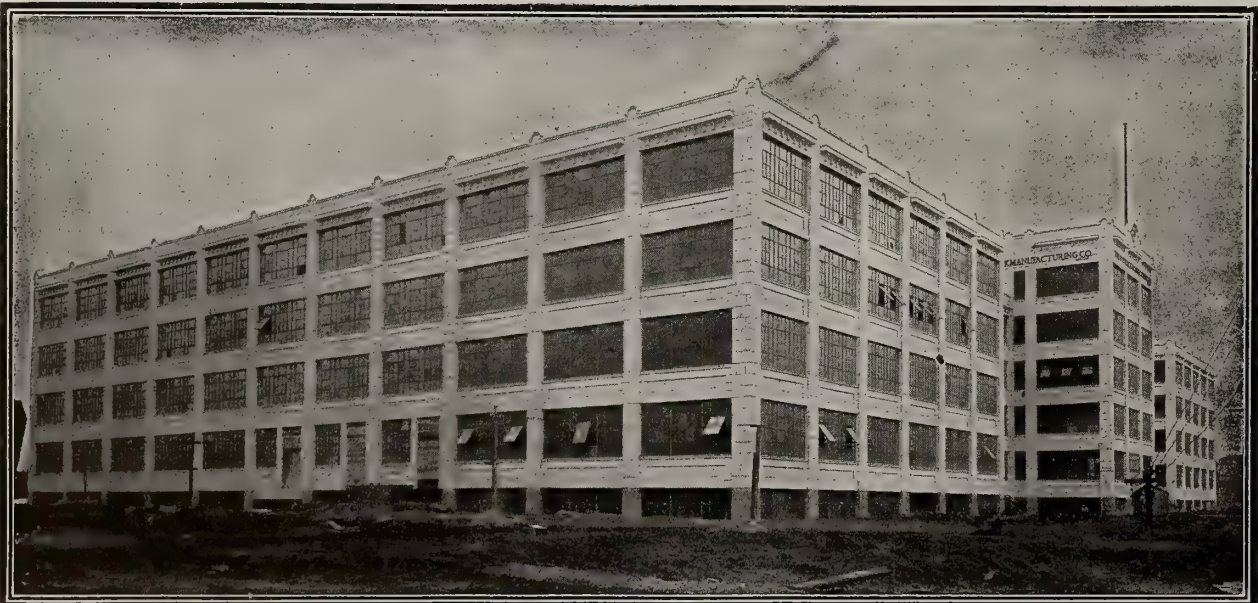
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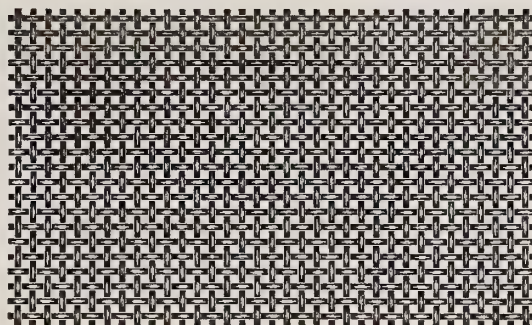


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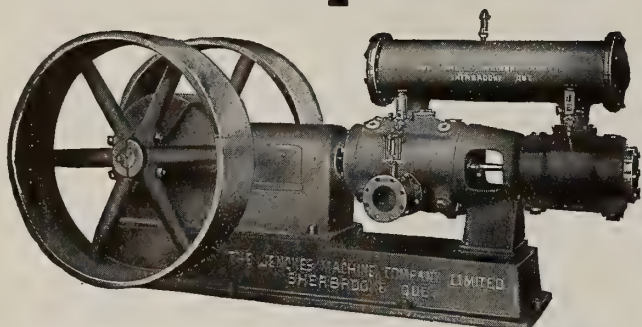
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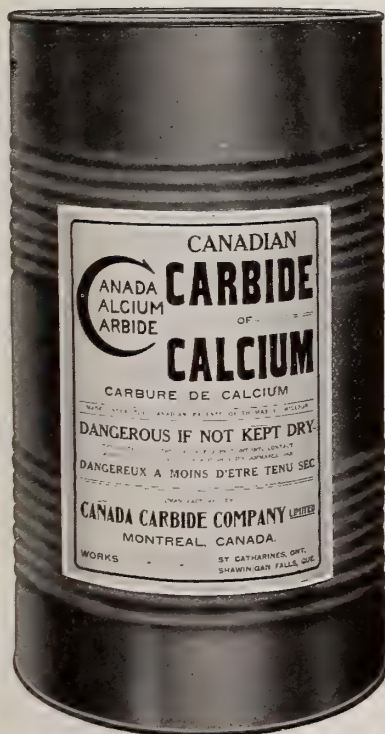
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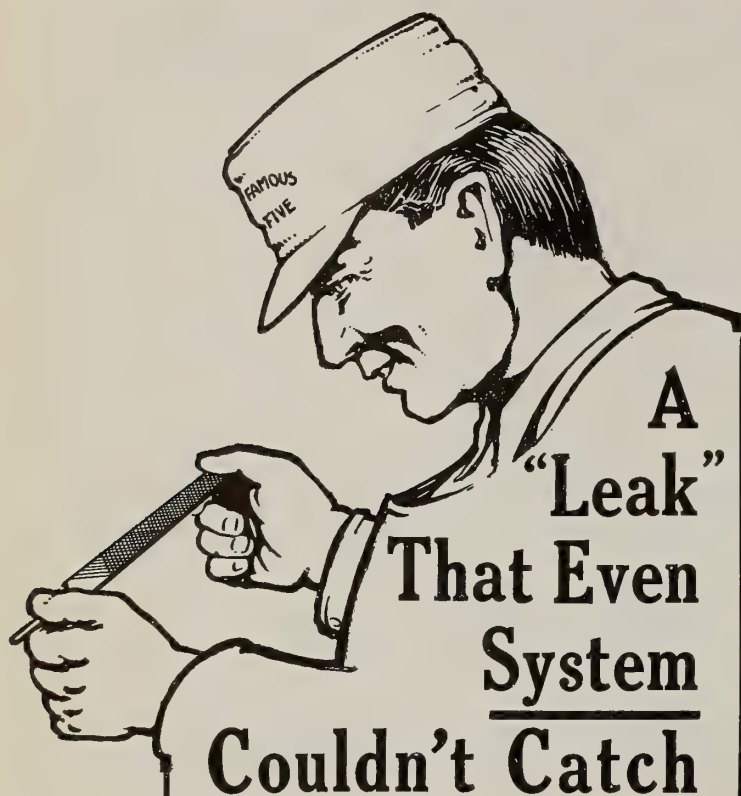
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We proved to him—by personal experience in his own shops—on his own work—that the more files he used the more money he SAVED. That the time saved and the extra work produced by using only EFFICIENT files, more than paid for the slight extra cost of additional files. While his old way of *wearing-out* files costs many times its price in wasted labor.

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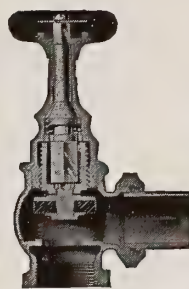
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Minister of Agriculture.

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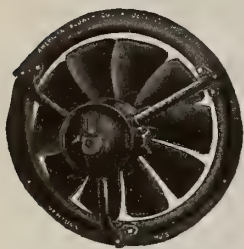
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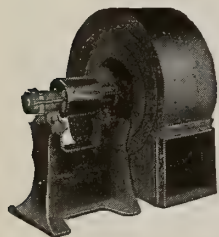
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A **GOOD** Covering pays for itself in one Season, and is a revenue producer indefinitely.
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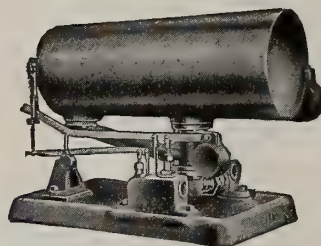
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Ship further—at less cost. Build new trade in new fields with this low-cost, light-weight corrugated fibre board box. With European competition shut down Canadian business is now going ahead rapidly, meeting new demands, extending into new markets. In your fight for business you can save money, reduce damage charges and give greater satisfaction to both old and new customers by using

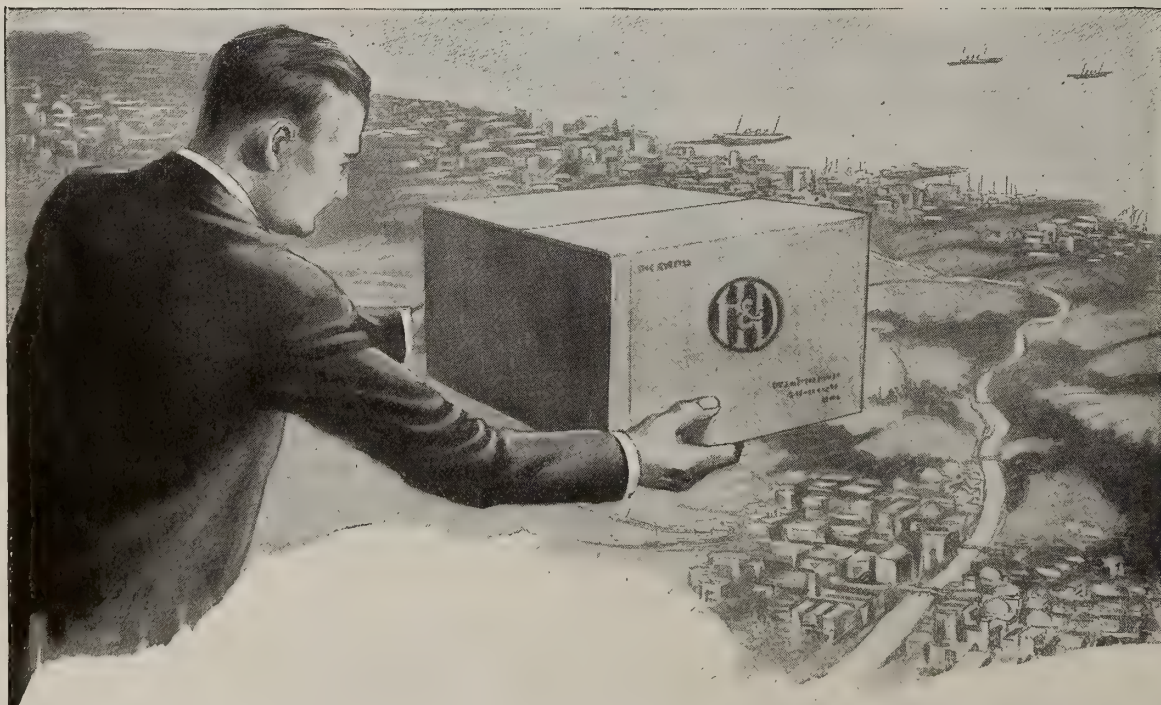
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H. & D. Boxes will save on your transportation charges, save your floor space, cut down packing expenses, and give you a positive protection against loss from damage. Dampness or frost cannot penetrate their

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PRODUCTS OF

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Makers in Canada of High Grade papers

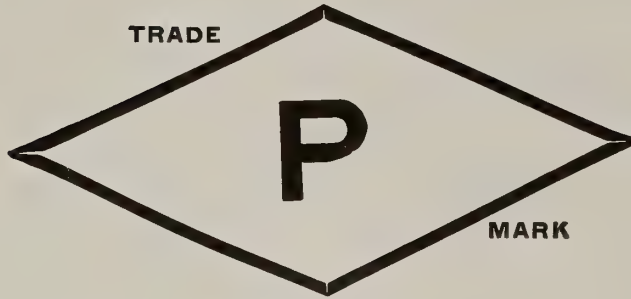
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Are made from special fibre stock, and are constructed so as to protect the goods from damage or breakage. At the same time saves 75 p.c. of weight of wooden cases.

These boxes comply with the freight classification and are accepted at the same rate as goods packed in wooden boxes. Can be used for shipping by freight or express any goods in reasonable weight package.

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The designs of our small locomotives are the result of wide experience.

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The Chapman Double Ball Bearing will save this waste and turn it into productive energy.

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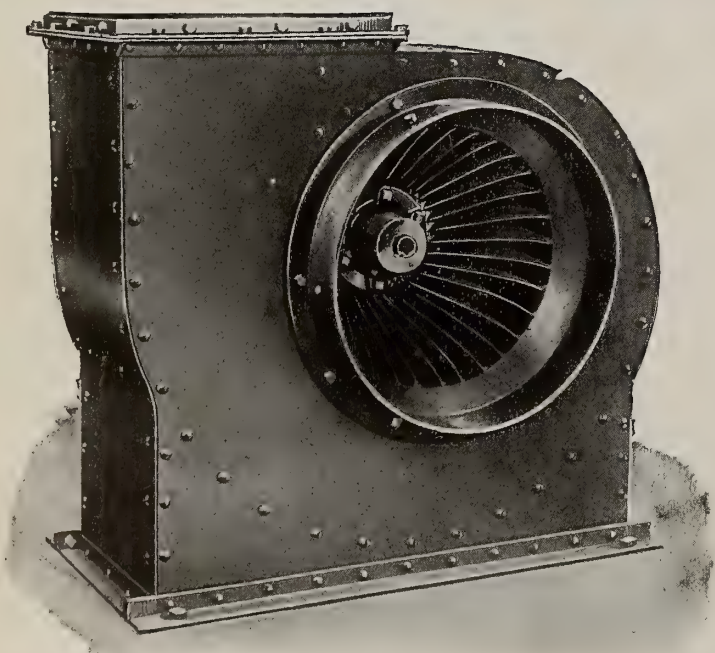
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Keith Fans

For Heating and Ventilating

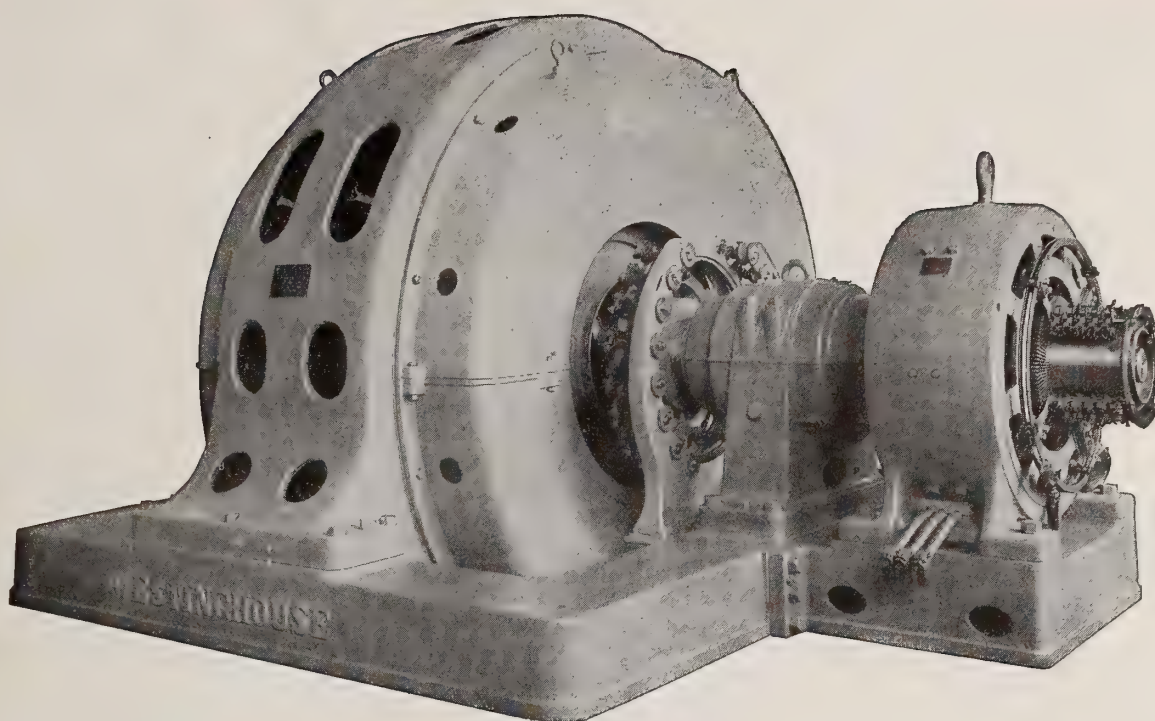
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One of Two Westinghouse 6,000 K.V.A. Synchronous Motors
supplied to the City of Winnipeg.

WESTINGHOUSE Synchronous Motors may be used to supply power and to correct power factor at the same time, thus reducing loss in transmission and doing useful work in addition.

The power-factor correction often benefits the power-supply company to such an extent, that it is enabled to give power users a lower rate, than before installing the synchronous motor.

Westinghouse Synchronous Motors are self-starting and self-synchronizing.

Canadian Westinghouse Co., Limited, Hamilton, Ont.

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*Main Street,
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***A tarviated road invariably means—
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MODERN engineers recognize that the automobile has come to stay and they built roads accordingly.

Experience has taught them that ordinary macadam cannot resist modern traffic. The rear wheels tear the fine stone loose and the surface blows away in the form of dust.

You have often seen this process of road disintegration, but the probabilities are you never fully realized that a dusty road meant *the road was wasting away*.

The way to build macadam roads today is to use a powerful binder, such as Tarvia, which not only adds greatly to the life of the roadway by making it automobile-proof, but also makes it dustless and mudless.

And of great importance to taxpayers, the reduction in maintenance expenses made possible by this treatment *more than pays for the cost of the Tarvia*.

Thousands of miles of roadway have been treated in this way, because the use of Tarvia means *better roads at lower cost*.

Tarvia is made in three grades to meet varying road conditions—"Tarvia X" for new or rebuilt roads and pavements, "Tarvia A" for hot surface applications, and "Tarvia B" for cold surface applications to prevent dust and preserve the road surface.

The illustration above shows the "Tarvia X" construction.

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This Company has a corps of trained engineers and chemists who have given years of study to modern road problems.

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If you will write to the nearest office regarding road problems and conditions in your vicinity the matter will have prompt attention.

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INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XVI

TORONTO, AUGUST, 1915

No. 4

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

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Dangers of Indiscriminate Recruiting.

UNLESS recruiting is scientifically organized so as to exercise care that too many skilled workmen are not taken away from the country, the efficiency of Canada's industrial system as a contributor to war munitions will be greatly impaired.

While every encouragement should be given to recruiting, it must be remembered that, during the early confusion of mobilization, hundreds of skilled operators were taken out of the factories of the United Kingdom, where they were urgently needed to make munitions, and sent to the trenches in France. Later, these men were brought back and put to work in the armament plants. During the past few months, hundreds of mechanics have left Canada for Britain in response to the demand for skilled men to engage in the production of munitions. If drains on the supply of our skilled workers continue, there will come a time when our industrial system may be seriously affected.

Consequently, henceforth, recruiting campaigns should be directed in a manner which will ensure that the supply of skilled men who may be needed in the manufacture of munitions of war shall not be dangerously diminished. Until the crop is harvested, a reasonable restraint is

advisable in recruiting from the farms, but preparations should be under way to launch a great campaign in the rural districts early in the fall. Men who have spent the summer in the fields will be in first-class physical condition, and with the finish of harvesting, urgent demands for their services will be greatly lessened.

Recruiting should, of course, continue among the employees of factories which will not be engaged in making war material, and should proceed simultaneously with the agricultural campaign. If military men, manufacturers and farmers formed recruiting committees in a great number of small centres throughout Canada, the supply of available men could be ascertained, with the result that successive campaigns could be planned to secure the enlistment of certain individuals and classes, with due regard to their usefulness to the country and to their individual responsibilities.

Take, as an example, a town of three thousand population which serves as a market and distributing centre for an agricultural district with a population of four thousand. In the town are five factories, one engaged in making shells, one in making uniforms, and the remainder in manufacturing ordinary articles for civic consumption. The military officials, the manufacturers and business men, and representative farmers form a committee. The names of all males of military age are registered, with full information regarding the occupation of each person listed. A request comes for a hundred recruits. The ensuing campaign is directed principally towards securing suitable and fit men, whose going will least impair the industrial and agricultural productive capacity of the community. As a consequence, the employees of the factories making shells and uniforms are discouraged from enlisting; those from the other factories are encouraged. Farmers' sons and farm laborers are advised to defer enlisting until the crops are harvested, after which special efforts will be made to secure them. Instead of depending entirely upon mass meetings, parades and speeches, the members of the committee devote considerable time to interviewing desirable men who can be spared. Such a committee would be of immense use, not only for recruiting, but also for raising subscriptions for the various patriotic funds, and for collecting information in regard to the community's production and the possibility of increasing it.

The Canadian Manufacturers Association has issued repeated appeals to its members urging their co-operation in

the task of carrying the war through to a successful conclusion. Up till the present, the factories of Canada have been the best recruiting fields for overseas service and we hope that their record will be continued and improved. Every effort should be made to furnish soldiers promptly and equip them well, but enlistment as well as production should be carefully organized in detail to get the last ounce of efficiency.

Buying War Munitions in Canada.

PRESS reports state that Sir Robert Borden, in the course of his speeches and interviews in England, is strongly advocating the increased purchasing of Canadian goods for war purposes. Other despatches state that General Hughes praises the steps being taken by the Hon. David Lloyd George, Minister of Munitions, which would indicate that the interests of Canadian manufacturers, in General Hughes' estimation, are being safeguarded. The visit of Mr. D. A. Thomas to Canada and his conference with our statesmen and manufacturers should produce results, as Mr. Thomas is one of the great captains of industry in the United Kingdom. The industrial resources of Canada are perhaps not even yet fully appreciated in Great Britain. We have a great national plant, created to keep pace with the extraordinary development which occurred during the decade ending with 1912. That plant has not been fully used since. It is well equipped with machinery, material, skilled workmen, technical advisers and able managers. Events are proving that Canadians can make almost anything that they try to make, and we believe that there are few munitions of war which they cannot produce outside of battleships and the heavier ammunition and artillery. As General Bertram pointed out in his recent address at Toronto, we have not only created the new industry of shell making, but we are also making high explosives and are developing a new branch of copper smelting as a result of the war.

Sir Robert Borden Studies Transportation.

SIR ROBERT BORDEN'S recent conference with the British Admiralty in regard to the possibility of improving transportation facilities between Canada and Europe, and also on the Pacific, is a matter of great importance to Canadian manufacturers. For two or three years before the outbreak of war, ocean freight rates had been increasing at such a rate that the export trade of Canadian manufacturers was being seriously affected. Investigations were ordered and were under way but the situation was greatly aggravated on the commencement of hostilities because a great number of ships were commissioned by the Admiralty for war purposes. Moreover, the fleet of German ships which had been engaging in the Atlantic trade was interned, and German cruisers and submarines have destroyed several hundred ships which were formerly engaged in the trans-Atlantic trade. As a result, freight rates have soared, available space has dimin-

ished and insurance has increased. Enormous quantities of munitions of war are now being made in Canada and there is every hope for believing that the output will be steadily augmented. As prospects are bright for an unusually heavy crop the task of transporting it is more serious than ever. How to get our war munitions and our crops to Europe in the face of the increasing scarcity of ships is a problem which will test to the uttermost the resources and ingenuity of transportation men in Canada and the United Kingdom. What steps will be taken we cannot surmise, but it is a relief to know that the matter is being considered by the Admiralty and is being pressed by the Premier of Canada.

The Psychology of Buying.

THE timorous mental attitude of the great body of purchasers is one of the causes which operates towards the continuance of business depression. The great crisis through which we are passing is so widespread that many of the well-known landmarks have been swept away, with the result that the difficulty of analyzing industrial conditions, an uncertain occupation at any time, is greatly increased. On the surface it would appear that the conditions related to manufacturing, which are supposed to determine its prosperity, are much improved. Over-speculation has been checked, inflated values have subsided, the prospect of unusually heavy crops is excellent, the probable aggregate price which will be paid for this crop should surpass all previous records, the deposits in the savings banks are greater than ever before, war orders for millions of dollars' worth of every kind of material are being placed in Canada, unemployment has been greatly reduced, and yet the depression remains. It seems reasonable to suppose that the causes above mentioned are working silently towards improvement but the uncertainty of the war and the fear of its results tend to neutralize their good influence. People are not buying freely. They buy necessities, they have cut down comforts, they are doing without luxuries. This statement, while it includes those whose buying power is small, refers particularly to those whose buying power has not been greatly impaired, to those who have bank accounts—they are not buying. Economy is generally considered to be a virtue, and economy among the individuals of a nation is usually a praiseworthy characteristic, but the fact remains that economy suddenly practised by all the buyers in the country may prove very disastrous to manufacturing. If, for example, all the men in Canada decided that they would wear their old neckties for two years, the effect upon necktie factories would be severe. We quite realize that the majority of the people in Canada are spending all they can afford to spend at the present time, but if those who have money would buy what they can well afford to buy, they would do much to mitigate the depression. In a previous editorial on this subject our point was not quite understood by some newspapers. We do not advocate that wholesale raids should be made upon bank accounts for the benefit of manufacturers and that people should spend their savings recklessly in an arti-

ficial attempt to restore prosperity. What we mean is that the brake of economy should not be so suddenly applied that the country is in danger of being jolted to a standstill.

Money spent for furniture, clothing, building material, food and other articles goes largely to the employees in these industries, and through them to the retail trade and back again into the banks.

If it becomes a confirmed national habit to imprison every dollar until it is rescued by force, the genial spirit of prosperity will be discouraged from returning.

Hoarding paralyzes trade; circulation invigorates.

Not What They Seem.

HOW foreign goods are sold to people, who are under the impression that they are buying Canadian goods, is described by a correspondent of *Nor' West Farmer*, the well-known agricultural paper in Winnipeg.

"Recently I purchased some hardware from a local merchant, which was apparently Made-in-Canada," says the writer. "Wear has now revealed another label under the original which on examination states that the article was manufactured in Rochester, New York, expressly for a Winnipeg firm. Under these circumstances how is one to know when he is buying a genuine 'Made-in-Canada' article."

This obstacle is constantly confronting the "Made-in-Canada" campaign. The difficulty of ascertaining the exact origin of the goods they are purchasing often discourages buyers from pressing their request for Canadian articles, and, in many cases, foreign articles are sold with full knowledge on the part of the vendors that the request for Canadian articles has not been met. This problem was discussed at the last annual convention of the Canadian Manufacturers Association, in connection with a proposal to establish the use of "Made-in-Canada" label for goods. The suggestion is now in the hands of the "Made-in-Canada" Committee and details are being worked out. It is to be hoped that the resulting action will terminate the practices of which the *Nor' West Farmer's* correspondent complains.

Is This True?

THE charge that Canadian manufacturers have been apathetic in taking advantage of trade opportunities created by the war is made by Trade Commissioner Dyer, of Leeds, England. Writing in the *Weekly Report* of the Trade and Commerce Department, he says:

"With the beginning of the war, the supply of various products and manufactured goods sent in normal times to the United Kingdom from European sources were immediately curtailed and in some cases entirely cut off. It was thought, therefore, that Canadian manufacturers would make an ambitious effort to secure some of this lost trade. With this object in view, investigations have been made into the prospects of marketing miscellaneous lines of goods from Canada, and this information, so valuable in itself,

has been published in the *Weekly Bulletin* and widely copied therefrom by the Canadian press and trade journals. It is possible that Canadian firms may have taken advantage of the opportunities presented, by at once negotiating with their regular trade connections, correspondents or agents in this country, and in more than one instance this is known to have been the case and business has resulted. But after taking all the circumstances into consideration and making due allowance for the high shipping and insurance rates and the fact that so many Canadian factories are busily engaged in the making of munitions and army supplies, the response from Canadian firms has nevertheless not been in that ratio which might have been looked for."

It would be difficult to determine what degree of fairness there is in the above statement. While much valuable information has undoubtedly been furnished by trade commissioners, there has been in some cases a regrettable tendency to describe conditions and opportunities in such vague and general terms that no help was given to manufacturers in the task of selling goods. Since the outbreak of the war the work done by the Trade and Commerce Department and its various commissioners and agents has been very satisfactory and an immense amount of definite information has been secured and published. We are not cognizant of the facts upon which Mr. Dyer bases his somewhat sweeping assertion, but if it is well founded manufacturers of Canada might as well face the truth. Each manufacturer should look into his own business and decide what he has done or what he can do to sell more goods abroad.

The Transportation Commission.

THE transportation problem in Canada is one of the most serious we have to face. It was a tremendous task to build our railroads; now that we have them built we are faced with the even greater task of making them pay. The railroads claim that they cannot operate profitably unless they raise their rates, a contention which manufacturers think has not been proved to the satisfaction of the shippers and receivers of freight. Lack of accurate information handicaps all discussion of the transportation situation. The indiscriminate resolutions passed by boards of trade and other bodies, are apt to be based upon local grievances and rarely give any adequate comprehension of the questions involved. The Railway Commission is a judicial body rather than an investigating board, and it was with this distinction in mind that the Canadian Manufacturers Association passed their resolution at their annual convention, asking the Dominion Government to appoint a thoroughly competent commission properly empowered for the purpose of investigating the transportation conditions in Canada and of making reports and recommendations. We hope that the Dominion Government will see fit to appoint such a commission without delay, because the transportation situation in Canada at the present time is one which requires immediate attention.

The Imports of Russia.

THE possibilities of the Russian market have been repeatedly brought before the attention of Canadian manufacturers since the outbreak of the war and the hope has been expressed that the export trade of Canada to Russia might be greatly increased. The total import trade of Russia for the year ending December 31, 1912, the last year for which complete statistics are available, has been compiled for INDUSTRIAL CANADA by the Trade and Commerce Department, Ottawa. The following statement shows the principal classes of imports, the amounts being in round numbers:—

Food stuffs and animals	\$115,000,000
Animal products and manufactures of ...	45,000,000
Wood, wooden wares and basket wares ...	23,000,000
Ceramic wares	15,000,000
Combustible asphalt, resins, etc.	52,000,000
Chemicals, drugs and colors	28,000,000
Ores, metal and metal wares	155,000,000
Paper goods and typographic wares	17,000,000
Textiles and manufactures of	140,000,000
Wearing apparel, small wares, etc.	9,000,000

The total imports from all countries amounted to about \$600,000,000. Comparatively speaking, the total amount of these imports is small. During the year ending March 31st, 1913, Canadian imports for consumption amounted to \$675,000,000. That is, although the population of Canada is less than one-twentieth of the population of Russia, our total imports exceeded those of Russia during the approximately similar period under consideration. The actual present import trade of Russia is not the only prize for which Canadian manufacturers will contend. While the annual imports of Canada are decreasing, the annual imports of Russia are increasing at an enormous rate, especially since the outbreak of war. Both inside and outside of Russia, it has been prophesied that this buying will not only continue, but will be greatly accelerated after the conclusion of the war. It is the new Russia, on the threshold of a period of construction and development, which arouses the interest of Canadian exporters.

War Vindicates National Policy.

FURTHER vindication of the National Policy has been furnished by the present war. If we had followed the Free Trader's ideal in Canada and confined the energies of our people to agriculture and the production of raw material, we would not now have an industrial system with which to aid in the gigantic task of producing sufficient munitions to overwhelm the enemy. Our factories are busy turning out all kinds of military equipment for ourselves and our Allies. If the National Policy had never been put in operation the industries of Canada would have been small, localized, and almost at the mercy of their powerful competitors from abroad. This war has proved that a country which has no industrial system cannot hope

to defend itself successfully. A powerful belligerent can cut off importations and reduce to impotence an adversary which does not possess factories in which to make munitions. A country which is almost entirely agricultural must buy its weapons and supplies. If it cannot buy them its situation is deplorable. When the present war broke out, Australia, Canada, New Zealand and South Africa, the four great self-governing Dominions which have built up industrial systems behind protective tariffs, immediately began to utilize their factories to equip their own forces and to supplement the overtaxed factories of the Motherland, and also to create and organize new industries. The fiscal policy which produces such results should not be lightly discarded.

Markets for Canadian Lumber.

SPECIAL markets which have been opened for Canadian lumber as a result of the war are described by Mr. H. R. MacMillan, the Special Commissioner, who was appointed by Sir George E. Foster to find such markets, in Weekly Bulletin No. 595 of the Trade and Commerce Department, Ottawa. This report deals with the United Kingdom. The most important direct demands for timber, attributable to the war, have been for huts and housing for troops and refugees, booms and defence works, shipbuilding, aeroplanes and strategic railways. For huts, scantling, light lumber and prepared roofing are principally in demand. No ready-made huts were used. Mr. MacMillan is of the opinion that lumber will be dearer in the United Kingdom henceforth, as the supply from Sweden is being restricted. He says that no opportunity should be lost in shipping Douglas fir and hemlock stock in merchantable grades, shiplap and inch stock, 2 by 4, and 2 by 6.

In regard to preparing shelters during the coming winter for refugees, Mr. MacMillan says that the material needed to rehabilitate the homes and industries will be beyond the resources of the timber-exporting countries of Europe. For military works heavy planks and timbers are used in all sizes. Where sizes greater than 10 inches by 10 inches by 30 feet are required, Douglas fir is usually specified. For shipbuilding the specifications require planks 2 inches by 12 inches by 25 feet and upwards, averaging not less than 30 feet, a proportion not exceeding 10 per cent. being 14 inches wide. They must be free from sap, shakes, injurious knots and defects. Between 8,000,000 and 10,000,000 feet of this material, which heretofore consisted of Dantzic pine from the Baltic and Germany, is required each year in the Government and private yards. The price has been \$45 and \$50 per thousand feet board measure. Dantzic material being now shut off, Douglas fir is for the first time being specified.

Mr. MacMillan states that Pacific coast spruce, known to the trade as silver spruce, is the only satisfactory timber for aeroplane construction. The quality demanded is absolutely clear and straight-grained, 3 inches to 6 inches in thickness, 10 to 14 inches and up in width, 10 feet and up in length, but preferably over 18 feet long. The price in

London has varied from \$170 to \$250 per thousand feet board measure.

The demand for timber for construction is limited practically to the demands of strategic railways. Douglas fir or pitch pine is specified. Further details may be secured from the Trade and Commerce Department.

In Weekly Report No. 596 Mr. MacMillan states that the most active branch of the timber industry is in box shooks because of the large shipments of military and naval supplies for the British forces and for the Allies. Complete specifications are given in this Report.

More Fire Prevention Education Needed.

THE necessity for maintaining the campaign to reduce the country's fire losses should be recognized more than ever by the people of Canada. The war is demonstrating the importance of the resources of a nation. In a young country like Canada the loss by fire is particularly severe because the labor and capital, which are required to replace such losses, should be utilized in development and construction. We are piling up an immense debt as a result of the war and can only pay this debt off by producing salable commodities; consequently, we should hoard all our raw material and protect it from destructive agencies such as fire. That some progress is being made is shown in the record of fire losses published by the *Monetary Times*. Canada's fire losses for June amounted to \$1,107,156, the lowest during the past seven years.

The National Fire Protection Association continues to do good work in educating the public in regard to fire losses, as the following measures advocated at its last annual meeting indicate:

1. The encouragement of fire-resistive building construction through the adoption of improved building codes by all states, cities and towns; the inclusion in such codes of adequate rules for exit facilities based on the occupancy for all buildings, and the general recognition of the fact that although fire-resistive construction is of the greatest possible importance, it is of itself not sufficient. The lesson of the greatest factory fire of the year is that large industrial buildings, even if built of cement and steel, must be subdivided by fire walls and must have adequate means of stopping fires in their incipiency.

2. The adoption of laws or ordinances requiring the installation of automatic sprinkler systems as fire extinguishing agents in all factories, commercial establishments and city blocks. The adoption of ordinances requiring the construction of fire division walls not only as a property protection device but as providing the best life-saving exit facility.

3. The establishment by law of a Fire Marshal in every state, who shall not be a mere political office holder, but a trained man with trained assistants competent to direct the work as statistician, educator and prosecutor.

4. The investigation of the cause of all fires by public officials, and the enactment of laws fixing personal lia-

bility for damage resulting from fires due to carelessness or neglect.

5. The consolidation of all legal forces so as to provide for the systematic inspection of all buildings by local firemen, and technically trained building and factory inspectors so as to insure the vigorous enforcement of rules for cleanliness, good housekeeping, and the maintenance of safe and unobstructed exits, fire-fighting apparatus and other protective devices.

6. The especial safeguarding of schools, theatres, factories and all other places in which numbers of people congregate or are employed.

7. The vigorous state and municipal regulation of the transportation, storage and use of all inflammable liquids and explosives.

8. A careful study of municipal water supplies, their adequacy and reliability with special reference to their adequacy in case of conflagrations.

9. The universal adoption and use of the safety match.

10. The education of children and the public generally in careful habits regarding the use of fire.

Canadians could not do better than make this a fire prevention year and, by education, prevention and co-operation, try to forward the important task of reducing the appalling destruction which annually falls upon life and property in this country.

Made-in-Canada Education.

REPRESENTATIVES from the principal universities in Canada met at Toronto in June for the purpose of discovering means to prevent graduates of Canadian universities from going abroad to complete their education in foreign universities. They believe in applying the "Made-in-Canada" idea to education. It was pointed out with regret that at present the facilities for pursuing post-graduate courses, especially those dealing with technical matters, are extremely limited in Canada, and that large numbers of Canadian graduates go abroad and spend their time and money in foreign universities. If post-graduate facilities were provided this annual emigration would be gradually lessened and many students, who remain abroad permanently after completing their courses, would be encouraged to take up their residence in Canada. This plan coincides with the long-standing demands of Canadian manufacturers for the encouragement of research work in the higher branches of technical knowledge. Modern industry is closely associated with the scientific man and his laboratory. At present hundreds of young Canadians are engaged in industrial scientific research throughout the various laboratories in the United States and other countries. If these men had the opportunity to pursue their labors in Canada, with the promise of reasonable rewards for their work, many of our industrial problems would be solved and many of our processes would be improved and cheapened. We hope that the heads of Canadian universities will continue to advocate their plan, which will receive the strong support of the manufacturers of this country if it is presented in a practical form.



The Great Dry-Dock and Shipbuilding Plant which was opened at Prince Rupert, B.C., on August 1st, by the Grand Trunk Pacific Railway

CANADA'S FINEST DRY-DOCK

By NORMAN LAMBERT

AS the stout little coasting steamer poked her nose around the end of Kaien Island, two gentlemen standing forward on the upper deck got their first glimpse of Prince Rupert and its wonderful natural harbor. Not until the boat was well within the harbor were they able to see where the mountains, which seemed to extend their bases to the very water front, left any room whatever for people to build houses and streets, and to live.

"What an awful site for a town!" exclaimed one as the boat approached the shore, and the rough, rocky character of the new transcontinental terminus became visible. The upheaval that made Kaien Island left a spot more or less accessible from the water, at the north-western end of the island. A mountaineer might have called the spot a rocky plateau; but a landscape artist who was confronted with the task of laying the site of a city on that particular area would possibly have refused to spoil a natural haunt for mountain goats, bear and other big game. Here, at any rate, on this rockbound foreground of a giant mountain, occupying an area some four miles long by one mile in width, it was decided to lay the foundations of a new northern metropolis, called Prince Rupert. And in ten years, since the first engineers arrived there to lay out streets and plan the townsite, the people of Prince Rupert have done wonderfully in improving their difficult physical position.

"But if the view of the town from here is not prepossessing," rejoined the other of the two gentlemen standing on the ship's deck, "the one they get from up yonder on those rocks must be delightful," and for the first time both men turned and looked first across at the mountainous shores forming the western boundary of the harbor, and then straight ahead to the north, where the beautiful expanse of water seemed enclosed by the meeting of mainland and the outlying islands. With a front of seven miles and a width of nearly three, with narrow but deep passages in from the sea, at each end, this harbor at Prince Rupert is one of the finest in the world. It

is deep enough and secluded enough to provide ample protection and deep-water anchorage for the entire British navy.

The excellence of the harbor explains the almost impossible nature of the townsite at Prince Rupert. There were other places along the Pacific coast, to the north, which would have made much better locations for the terminus of a railway, and would have been more desirable sites from the point of view of the builder. But Prince Rupert, wherever it might have been located, must look to the sea for its future. Its harbor, therefore, is its greatest asset, and to-day there is being finished on the waterfront at Prince Rupert a system of dry-docks, wharves, shipbuilding sheds, shops and power-houses which will add greatly to Nature's handiwork in making the Prince Rupert harbor the most important haven for ships of all classes on the Pacific coast.

Many people have been heard to ask with scepticism, "What is there in Prince Rupert to make it a place of any account?" INDUSTRIAL CANADA, in the July number, published an article which in some measure showed the great possibilities of the fishing industry of the North Pacific coast. Sir George Doughty, the great British fish king, is credited with saying, three years ago, that the fish industry alone at Prince Rupert could employ thirty thousand men. And to-day, in the harbor of Prince Rupert, frequently one may see one or other of Sir George's trawlers at work catching herrings.

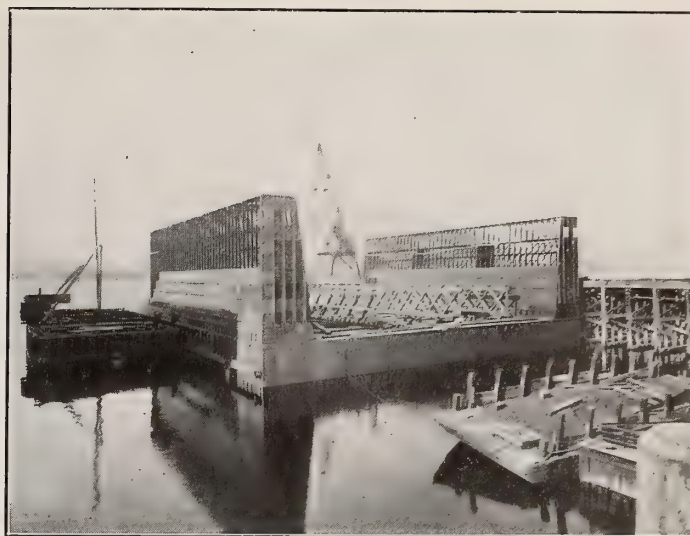
A few weeks ago, Mr. Æmilus Irving, of Toronto, returned from a six months' trip to Britain and Russia, with a contract for making locomotives for the government of the latter country. He said publicly at that time, "the future contains great possibilities for Canada in the matter of trade with Russia." Another gentleman from the Pacific coast, a lumberman, said about the same time: "The lumbering interests of British Columbia realize now that they have to get a place in the world markets. China alone, along the Yang Tse Kiang River, has been using 150 million feet of lumber per year, and most of it has been imported from the Pacific coast mills

of the United States." In the same way, flour has been going to the far eastern countries from the United States, and a large trade has been developed without much competition from Canada. If there is a place in the far East for iron and steel products, lumber and flour, from America, why not also for fish and its valuable by-product, fertilizer?

With a sea route to Japan and the Asiatic ports on the Pacific five hundred miles shorter than from any other port along the American coast, Prince Rupert is directly in the path of a big volume of trade between this country and the Orient. A port necessarily depends upon its proximity to the shortest route between two countries. Prince Rupert, first, is fortunate in having a splendid natural harbor, and, secondly, in being five hundred miles nearer to the east coast of Asia than any other point on the American continent and is connected by a marvellously level line of railway with four thousand miles of territory to the east. It would seem, therefore, that if Prince Rupert is providing good accommodation for shipping in and out across the Pacific, it should become in due time, an important seaport.

On August 1, according to the word of W. T. Donnelly, of New York, the marine engineer in charge of the building, the G. T. P. subsidized dry-dock at Prince Rupert was practically completed, and is now ready to do business. This dry-dock and its accompanying plant constitutes the largest and finest establishment of its kind on the Pacific coast, either in the United States or Canada, and is one of the most complete in America. Such is the brief description that has been given to it by the engineers in charge, and the Chief, as well as the two principal superintendents under him, were all experts from the United States who have seen every dry-dock worth seeing, on this continent, at least.

In 1911, the preliminary survey of the site proposed for the dry-dock plant was made, at a point on the harbor front, just a little distance north-west of the town of Prince Rupert. In 1912, gangs of men began the work of constructing wharves and piers and a platform on which to build the pontoons for the dry-dock. It has taken over three years to complete the work, which has been done at a cost of \$2,500,000. The original subsidy voted by the Federal government for the dry-dock amounted to two million dollars. The dry-dock is divided into three sections, and each section is complete in itself as a dock, with pumps and air compressor. There are two end sections with a capacity of 5,000 tons each, and a middle section which has a capacity of 10,000 tons. All the sections are interchangeable, and they can be so arranged as to constitute one huge dock with a total capacity of 20,000 tons. This means that accommodation could be given to boats of almost any size needing repairs. Any of the sections would be able



The New Dry-Dock, at Prince Rupert, just Completed

to hold the average fishing boat that operates up and down the coast, and the three sections, united into one dock, can easily hold a boat 600 feet in length.

The first step in the construction of the dry-dock was the building of the ship-shed and carpenter shop, where the pontoons which form the foundation of the steel superstructure of the dry-dock units were to be put together. This ship-shed and carpenter shop, which is one of five units, outside of the dock itself, to make up the plant, will be described in a later paragraph. It was there that the pontoons were built. In all there were twelve of these pontoons, three for each of the end sections of the dry-dock, and six for the middle section. Each one weighed five hundred tons, and the launchings of each pontoon marked a merry festival in the progress of the work. A launching usually took place at high tide, which in case of the last pontoon was at one o'clock in the morning, and a large proportion of the population of Prince Rupert was always on hand to see the huge creation of heavy timbers slide down the greased skidway and land with a resounding splash in the water. Mr. C. N. Crowell, who has had forty years' experience in marine building, was in charge of the pontoon construction, and the twelve of them were built and placed in the water without a hitch.

The construction of the pontoon is a very important part of the proceedings in the creation of a dry-dock. It is the portion of the dock that is submerged when the whole structure is lowered to receive a vessel, and being in contact with the sea water both inside and outside, the wood of the pontoon has to be specially treated, so as to be proof against the



View across Harbor of Prince Rupert, B.C.

injurious attacks of the teredo. Each pontoon contains some four million feet of timber and 380 tons of galvanized iron fastenings. Each layer of timber is covered with pine tar, poisoned with arsenic, and a layer of galvanized iron as well is swabbed with the same poisonous mixture. The outside covering is of lumber 1½ inches thick, which has been saturated with creosote. If these precautions against the inroads of the teredo are not taken, that pernicious little barnacle would soon make short work of the stout sides of the pontoon. The teredo, which is a gelatinous sort of animal, and extends itself into a mass on the face of whatever material it may attach itself to, will eat into and render useless large wooden piles within two years.

In each pontoon are placed two centrifugal pumps, with a total pumping capacity of 800 horse-power, and in an hour and a half these two huge pumps are able to empty completely of water any unit of the dry dock that may be submerged.

So much for the dry-dock proper. But there is the plant on shore, subsidiary to it, and in the various units of that plant are contained the facilities for establishing at Prince Rupert not only a ship repairing yard, but also a shipbuilding industry. First, there is the power-house, which the superintending engineer, Mr. J. H. Pillsbury, told the writer had been provided with a capacity for an enlarged equipment at any time that would operate the machinery of the largest shipyards in the world. Just now, the power-house is equipped with two 1,000 kilowatt turbo-generators and one 1,500-foot air compressor. From the power-house there extends, underground, to all the other units in the yard, supplies of electrical energy and compressed air.

Secondly, there is the foundry, with its giant cranes, its blasting furnaces and moulding rooms. Here a casting of twelve tons can be made, and the strongest crane has a lifting strength of fifteen tons.

Thirdly, there is the boiler shop, which is not only equipped for the work of marine repairing, but also has every facility for making boilers.

Fourthly, there is the machine shop, and the principal feature in this unit is a giant lathe with a 72-inch head, which can be adjusted to take a shaft sixty feet in length.

Lastly, there is the ship-shed and carpenter shop, which is the largest and most pretentious-looking building of the whole plant. It is three hundred feet long by one hundred and sixty feet in width. Half of the ground surface is taken up by the floor of the carpenter shop, while the other and lower half, extending to the water's edge, provides a large clear space on which craft of different kinds and sizes can be built. This latter half of the shed is overhung by an umbrella-like roof, beneath whose shelter extend long steel runways, from

which cranes of various sizes are suspended. Immediately above the floor of the carpenter shop, and upstairs, is the moulding shop, where designs are made and plans of ships can be laid out.

Altogether, the group of workshops surrounding the dry-dock at Prince Rupert is most complete as well as being favorably situated. The plant is now open for business. It will be under the management of the Grand Trunk Pacific Railway, and, as in the case of the railway itself, the dry-dock has been strongly supported by the Dominion government. The dry-dock will have to earn enough to pay the interest on two and a half million dollars, at least, and with the shipping trade in its present state on the Pacific coast one wonders just where the business is going to come from. Looking at Prince Rupert's strong strategical position with regard to the Far East, and the possibilities of trade with new lands, in post-bellum days, the ultimate future of this port seems assured in the matter of shipping. But what about ship-building?

There has been a growing feeling throughout Canada lately that Sir George Foster's scheme, whatever it may be in detail, of placing Australia, New Zealand and this country on a co-operative basis in the matter of trans-Pacific trade and also trans-Pacific defence, is the proper one to follow. Now, if there is one place more suited than another to be a base where warcraft might be built, it is Prince Rupert. The chief marine engineer of the new dry-dock told the writer that submarines, for instance, could be built at Prince Rupert with the equipment that is now installed there as easily and as well as at any navy yard on this continent. Furthermore, the Pacific coast line of Canada, if in need of naval protection at all, can be protected by submarine vessels more effectively than anything else. Islands extend from the international boundary line below Vancouver, along the Canadian coast, all the way to Alaska, and they lie out from the mainland for distances ranging from two to sixty miles, leaving deep, narrow passages of sea, eminently suited to the lurking character of the submarine.

Aside from the demands of possible naval warfare, or from the need of protecting future trade routes to the Far East, is it not time for Canada to be laying plans for a merchant marine? Even now Vancouver is suffering, as well as Prince Rupert, from the better accommodation in the matter of ships that is being enjoyed by rival ports across the line. Is the Panama Canal not to accrue in the least to the benefit of Canadian points along the Pacific coast? Canada should have ships of her own. The country is naturally equipped at both coasts for the building of merchant as well as small war vessels. In addition to such natural equipment, the north Pacific coast now has a complete plant at Prince Rupert, open and ready to turn its machinery to some national use.

NOT CONNECTED WITH GERMANS.

Messrs. William Jacks & Co., of 5 East India Avenue, London, and 111 New Street, Birmingham, ask us to state that they are not connected with the Glasgow firm of the same name who are being prosecuted in Edinburgh by the Government under the Trading with the Enemy Acts; that no member of their firm has any interest in such Glasgow firm, and that no member of such Glasgow firm has any interest in their firm.

The Marconi Wireless Telegraph Company, Montreal, have issued a Year Book of wireless telegraphy and telephony for 1915. It contains some valuable information in the shape of articles dealing with the technical and commercial development of telegraphy and telephony.



Early Days in Prince Rupert

INDUSTRY AND ART

By ROBERT MACKAY FRIPP, L.A.C., F.S.A.

ANY reference to the relations of Industry and Art usually evokes a smile or a protest, either from art workers, that is to say artists and arts craftsmen, who affirm that commercial methods have divorced Art from Industry, or from the everyday man in the street who cannot see that Industry is or can be in any way dependent upon Art. It is one of the objects of this paper to show that both these views are incorrect. It is necessary, in the first place, to examine what the term "Art" means and to define the various gradations of Art. Not every form of art enters into industry nor does every industry associate itself even remotely with art. Industry in relation to Art must be understood to mean the manufacture of raw material into goods, and it will be shown that Art does enter very largely into practically every product of manufacture.

Man in his earliest stages produced articles to satisfy his most immediate needs and yet a desire for beauty is apparent in every phase of his development. This artistic craving, which is one of the first evidences of an intelligence superior to that of other members of the animal world, is to be detected even in the remains or traces of prehistoric man, and throughout all the phases of the development of civilized man this æsthetic instinct grows more and more marked and at no period has mankind shown so general and all pervading a desire to satisfy it than at this present existing phase of his existence. In the face of all that is talked and written concerning the commercialism and killing of handicraft and art this may at first appear to be an anachronism.

Mechanical Aids to Art.

Art must be considered in its most inclusive sense. Very few of the articles produced for the use and service of man are prepared for use alone and without regard to their appearance; the moment appearance receives the slightest consideration then Art enters; the greater the degree of consideration paid to appearance just so much the greater is the part played by Art. Art in the highest sense has no concern for utility and musical composition is the purest form of Art as it appeals to man's æsthetic perceptions and in no way to his physical needs or demands; it may be stated as an axiom that those arts which appeal the more exclusively to the sense of beauty are the pure or high arts and that the less they do so the less are they artistic. Music, sculpture in some forms, some literature, painting and, in occasional instances, architecture are the pure arts, the satisfaction of the æsthetic alone being the object of their production. Arts, crafts, handicrafts, applied arts, the industrial art, all more or less interwoven, are the forms of art with which we are dealing and it is these forms which are supposed to suffer most severely from the ingenuity of modern mechanism, the influence of commercial production and distribution. Pure handicraft is being in a measure superseded by mechanical means of reproduction, which often deprives the product of much, if not of all of its æsthetic value, but it does not necessarily follow that mechanical aids will or must always have this result. It must be admitted that mechanical aids to production will constantly increase, therefore it is for the artist and the designer to meet the imperative, not to avoid it. It is absurd for the arts craftsman to rail at mechanical aid; what arts craft is carried on entirely without it? The invention of the chisel revolutionized stone carving in Northern Europe during the 12th century; the stone cutting axe had been previously used for architectural

carving and sculpture in Norman buildings; with the advent of the chisel all decorative features such as carving and mouldings immediately expanded like a rose in June. The application of the saw to stone and marble, the invention of casting metals, both certainly increased the productivity of the sculptor, and no sculptor complains that these distinctly mechanical contrivances have injured his art. The periods in the history of engraving are marked by the introduction of mechanical aids, copper was substituted for wood not only to secure finer artistic results but also to obtain a greatly increased number of prints. The graver was reinforced by the roulette in mezzotint, and stipple and aquatint are quicker methods than mezzotint; copper was displaced by steel for the same reason copper displaced boxwood, and steel in turn gives way to lithography. Photography renders reproducing processes still simpler with the result that illustration becomes at length a cheap process of great commercial and industrial value, the purely artistic value is reduced in proportion to the increased utilitarian value derived from the employment of mechanical aids. It is not to be doubted, however, that the net result is a great profit to mankind, further than this, be it remembered, engraving on wood, copper, steel and stone is still much practised as a Fine Art, and is eagerly sought by those who appreciate the art for its beauty. Reproduction by commercial processes has introduced a form of art to layers of society not previously reached by the higher form.

As it is with engraving so it is with printing and book-making. These arts crafts have become commercialized to the immeasurable gain of humanity; the poorly sewn, glued and pressed cheap machine made modern book compares not at all with the simplest example of bookmaking of a century ago as a fine piece of craftsmanship, but the most ardent lover of the Book would not set the clock back for he can, if he wish, still obtain every one of the fine qualities exhibited in the making of a volume of the past in the volume of the present, at a price.

Evolution of Industries.

When man first discovered that clay would burn he thumbed his pots and set them in the ashes to crack, split, run or twist out of shape as the event might prove. The potter's wheel was as great a discovery in mechanics as ever "ruined" craftsmanship; the pottery of Copenhagen, Sèvres, Lambeth, Worcester, Derby, with its splendor of variety of form and color is the result of scarcely greater development in industrial reproduction than was the pot first produced on the wheel as compared to the pot made before the advent of the, at that time, no doubt, astonishing invention.

Who in these days need buy anything ugly? Every pan and pot, curtain, rug, or wall paper, every article that is in common use is prepared with a view to please the sense of beauty as well as to answer a purpose; were the public taste in these things more fastidious the manufacturer would endeavor to meet the demand for better taste. Even our wondrously ugly kitchen ranges and hall stoves are "decorated" with an almost savage avoidance of pleasant forms and appropriate application, but bad as is the taste displayed it is none the less done with the object of making the goods pleasing and attractive to the purchaser. In dress, every portion from the pattern of the cloth to the shape and color of a button is most carefully designed to attract. In some building materials more attention is paid to design than to quality;

step into a hardware store, note the variety of "finishes" and pattern given to such an everyday article of utility as the handle and escutcheon of a door lock; the quality is often poor as the design is good; the price prohibits quality, but quality alone would not effect sales, whereas an attractive design will often sell in spite of the absence of quality. This preference for beauty or what passes for beauty over quality of material and excellence of workmanship, is the great impediment in the path of true development; the public taste is not educated to discriminate between ill made shoddy goods and those of superior quality or to appreciate the artistic value of simpler effects.

The Demand for Beauty.

It is necessary to dwell upon this insistent demand for beauty that pervades every social layer; it is this fact which should be kept constantly before artists and art workers as well as before the manufacturers, for herein lies their opportunity to raise public taste, to create higher standards. It is by co-operating freely with Industry that Art can accomplish this aim. Mechanical reproduction is a great economic fact, it tends in some ways to lower the standard of the art worker, even in some cases to eliminate the craftsman, but it operates most beneficially in placing an ever widening range of useful and necessary commodities in possession of an increasingly great proportion of the people; it must therefore be a great and beneficial factor in our economic life. Every simplification of method does not always result in improved product but by cheapening the cost of production it places the product within the reach of some social layer perhaps hitherto debarred by price from participating in the enjoyment of the article. That it may be distressingly ugly is due to the absence of co-operation between Art and Industry, both in consequence suffer, industry finds its market limited to the poorest section of the community, to those purchasers to whom cheapness is the first essential and whose taste is the least refined; were Industry in such a case to seek the assistance of Art the cost of production need not be increased but the improvement in the artistic merit of the product would probably, almost certainly, ensure a broader sale, thus the commercial advantage would advance in proportion to the increased artistic value—i.e., its degree of attractiveness. Of course, it may be affirmed that in some products prepared for, say, such a trade as the supply of printed cottons to Africans, it would be useless to give any artistic merit to the design; but even in this extreme instance the argument does not hold good for thousands of new designs are made every year to appeal to the artistic tastes of the Darkies! It is absolutely necessary even here to give due consideration to the all pervading love of beauty. Art is simply the expression of this love of beauty. The production of things for the sake of beauty alone results in "pure art," the production of things the primary function of which is to serve some useful purpose is Industry, and as Art descends the scale and is produced by means more and more mechanical the less truly artistic it becomes. Industry and Art therefore are essentially opposed, the more Industry, i.e., mechanical means, enters into an art the less nearly allied to pure art does that art become, and the less art enters into all industrial reproduction the lower in the scale of the industrial arts will that particular industry or manufacture stand. The employers of mechanical aid must seek the active co-operation of the arts, or fail to compete with those who do so. In a word, Art cannot be, or is very rarely, entirely separated from Industry. A manufacturing people or a people intending to become of industrial importance must encourage the pure arts from which spring the less or the applied arts and crafts. The greater the refinement the greater the appreciation. Picture galleries, sculpture, monumental architecture, collec-

tions of examples of fine art, of historic furniture, laces, book-bindings, jewellery, carvings, hangings, in short of everything of real artistic merit should be provided for the purpose of elevating the public taste, the people should be encouraged to visit these galleries and to attend lectures, talks and discussions.

Taking Care of the Worker.

In the past manufacture has too often been carried on under squalid conditions, the artificer being regarded as a "hand," he and his condemned to exist in soul-destroying environments. A genius may be and actually is occasionally discovered in a garret, but no record is kept of those who perish there; Art is entering at last into even this aspect of Industry, garden cities are now sometimes erected to take the place of mean monstrous miles of drab-colored cottages, and worse; children there will be brought up amid flowers, trees and grass, instead of broken bottles in the gutter. They will be more receptive, the love of beauty inherent even in the gutter snipe will be developed and refined and so will react upon Industry by creating a demand for increased refinement in design.

Speaking on the influence of Art upon Industry, Sir Charles Waldstein, Litt.D., Ph.D., Slade professor of Fine Art, Cambridge, said recently: "It is in the interest of every civilized state to further as much as possible the production of such works of beauty which raise the taste of the nation, and not to discourage it. As I have said before, the state ought even to subvention the production of such works."

The greatest manufacturing peoples pay more attention year by year to art training, especially in connection with design for industrial purposes. Germany, whose commercial methods approximate her methods in making war, goes to extraordinary lengths to secure possession of the designs of competing nations, so great is the importance attached by her manufacturers to originality and novelty in design; in some English mills stringent measures are taken to guard new designs from this piracy, until the goods have been placed upon the market, German firms having descended to every base means by which to obtain possession of these new designs and to rush them out ahead of their rivals. This is mentioned to emphasize the importance of the part played by Art in Industry.

Demand for New Ideas.

Printed goods, such as cottons, were common in Ancient Egypt, and the practice of pressing the pattern on the stuff by means of small clay or wooden stamps is followed in Java to-day, many of the antique designs were excellent and the colors well chosen, so they still are when rolled out by the ten thousand yards in a modern mill in Lancashire, where the actual pattern and color arrangement are as carefully studied as would be the case were the method of stamping of 6,000 years ago still adhered to; new arrangements of form and color are eagerly sought by the English textile manufacturers, who frequently complain of the difficulty of obtaining them, and this in a country where Schools of Art are numbered by the hundreds and Art Students by the thousand; this shortage is at present the subject of grave consideration and the cause of a somewhat acrid discussion between the manufacturers and the Art Schools, a matter referred to more fully a little later.

I have endeavored to show that so far from Art being divorced from Industry the two are indivisible, every article in common use being made to appear attractive, briefly to satisfy that craving for beauty which pervades the human family. There can be no question as to the necessity of Art to Industry any more than there is as to the necessity for Industry itself.

Pure art, certainly is not brought into touch with Industry, to which it is in a sense opposed, pure art, as has been shown, being produced for the sake of beauty only and the less utility enters into its purpose and the less mechanical aid enters into its production, the purer is that form of art. The function of Industry is utility; the arts which have direct relations with Industry are the applied arts or those descended from the handicrafts. To convert these lesser but very important arts to the service of Industry is one of the great tasks which face all great industrial nations and, parenthetically, those nations which would become great manufacturers.

The greater the refinement shown in the design of the products of Industry, the greater the degree of beauty to which they attain, the more desirable are they considered and the wider the range of purchasers to whom they appeal. The greater attention Industry pays to good taste and good design, that is to say, the more closely she co-operates with Art, just that much greater will her commercial success prove. Industries which fail to recognize the great commercial value of good design cannot successfully compete with those who do so and are consequently able to lead in the market because of originality, refinement or freshness of design.

Qualities of the Designer.

The supply of skilled designers, as some one has said "regularly on tap" is as great a necessity to the manufacturer as is the supply of skilled artisans. The designer must be not only a good draughtsman thoroughly trained to draw from nature, educated in tradition and ready at converting natural forms and the adaptation of traditional forms and styles to his own inspirations and requirements, but he must also be thoroughly acquainted with the mechanical process by which his designs are to be produced. The designer must understand precisely the possibilities and the limitations of both the machine and the material, the ruling thought in the preparation of a design should be the method of its construction, it is useless to provide designs for weaving which would be suitable to printing and vice versa—the nature of the material and the method of its composition, i.e., construction, must always enter primarily into the design, the form of the design must be suited to the material; the artist must also work in sympathy with the manufacturer who has ever to consider his market; this leading consideration cannot be ignored, the design which sells is the good one from the manufacturer's point of view, however bad the artist may know it to be, and herein lies the most difficult condition with which the artist has to contend and which is mainly responsible for the deadening effect of commercialism, still it must be recognized that the manufacturer cannot disregard the object for which he works, the making of money. Except in rare cases he concerns himself with art, taste or design only when it serves that object; some of the worst rubbish produces the biggest monetary results, whether it be the most vulgar music, trashy novel, tinsplate, hardware or startling wall paper, or bandy-legged furniture, and at first sight this is discouraging, but the designs of the most inferior products tend towards improvement as it has to parallel the slow but constant refinement of those social strata for whose use they are intended.

To raise the general average of public taste it is necessary to raise the artistic quality of those industrial products prepared for the average consumer, and this is to be effected by the State directly and indirectly. Directly by establishing Art Classes in connection with all public schools, these to form a preparation to the entry to further and more complete education in Schools of Art, where the students can be produced to furnish the demands of Industry. Improved environment is the best indirect means and this the State can and undoubtedly

should provide, for in all public works it can insist upon the employment of the highest procurable artistic talents. In the case of public buildings the selection of the architect of known ability ought to be the guiding principle, and with him should be associated sculptors, architectural sculptors, carvers, painters, designers in mosaics, stained glass, metal work, etc., and by so doing direct encouragement would be given to artistic worth; the buildings would in every instance exert a far-reaching educational influence. The teachers of Art in the schools should be directed to take their classes to these buildings so that work could be seen at the various stages of its development, and pupils and students would by these means gain a clearer perception of what their school teaching was intended to lead up to. Each piece of public work so executed, and no public work ought to be permitted to be executed in any other manner, would become a permanent monument to the taste of the people and to the ability of its artists. This association of all artists and art workers resulted in the past in the finest works the world knows, the method is perfectly feasible now, is absolutely sound business, its adoption would be welcomed by every person of education and would tend to create the healthiest emulation in art between city and city, moreover it would render impossible the repetition of those much too evident monuments erected by Incapacity to Indifference which disfigure this broad land from end to end. This "direct-indirect" method of education would proceed without encroaching upon the direct methods of the schools whose teaching it would serve to enforce and to illustrate. Every town should possess an Art Gallery where the collection should not be restricted to objects of fine, or pure, art but should include every description of art work, a sort of Library of Reference for the Artist, Craftsman, Student and Lover of Art.

Art Schools.

To return to the direct teaching of the Schools of Art which I have already referred to as not being entirely satisfactory from the point of view of the manufacturer. The Masters of the Schools of Art explain that they have as their object the training of students in all branches of Art, and that while much remains to be done the schools are really giving a sound training to students of design for manufacturers; Technical Schools teach the search for the most economical method and to maintain interest in handicraft, whereas Schools of Art seek to teach how to impress upon goods the best taste in design and color, the inference is that Technical School and Art School training should be concurrent when the pupil is destined for the service of Industry. The manufacturers are accused of failing to appreciate the true value of the work done in the schools, and the manufacturers retort that the practical element is absent in the schools and that they have to train their designers or supplement their training in their own studios for their own work, and they also maintain that the school men too often design without regard to the limitations of the machine, with consequent loss of time and money.

Art and Manufacturers.

Probably both sides are in error, the manufacturer would like the nation to provide for his particular requirements of art, and this the schools apparently decline to do for him, as commercial art is not their one reason for existence. Artists as a body certainly maintain that manufacturers know nothing of Art, while manufacturers declare that artists know little, if anything, of the requirements of Industry; yet it may be fairly said that manufacture is in a sense very dependent upon Art and at the same time affords great scope to the latter.

At a meeting of the Calico Printers Association, Mr. W. T. Hesketh, the head of the designers' department, announced

that nearly 50,000 designs passed through his hands in a year, nearly all of them requiring the exercise of some artistic ability to produce; if one branch of the textile industry requires such a selection of designs the total required by that industry as a whole must be enormous. Consider all the needs of the potteries, the great varieties of building materials, such as wall papers, metal work, glass, mosaic, tiles, hardware, etc., and so on down the long list of industries, great and small, into which design enters as an important factor and the magnitude of the demands made upon Art by Industry may be dimly understood. The debt owed to the Art Schools is none the less great because it might be and perhaps should be greater; the degree of the success of the schools in meeting the requirements of Industry is probably a debatable point, as may also be the methods by which their usefulness in this particular direction may be increased, but that they are absolutely indispensable is indubitable.

Necessity for Efficiency.

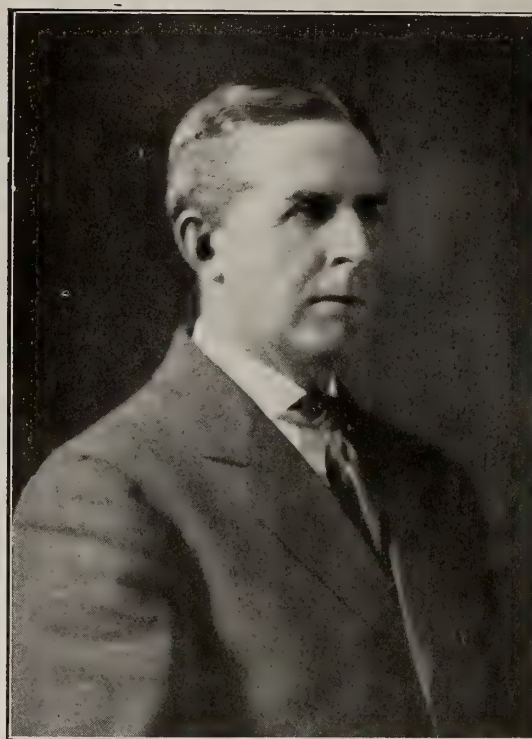
Modern national success in commerce is dependent upon the efficiency of the industrial occupations, and the success of many of the most important industries is unquestionably largely dependent upon the quality of their applied arts, that is to say upon specially trained and equipped designers, the production of whom in sufficient numbers, and of the necessary degree of efficiency, is of the utmost importance, it is upon public, that is national, Schools of Art that Industry must in the main rely. It may seem startling, but it is absolutely correct, to state that national success and pre-eminence in many Industries can only be reached through Art training.

What Provisions for Art?

The air of Canada is thick with rumors of industrial projects, we read and hear everywhere of the industrial ambition of the country. Our vast natural resources, our increasing population, the untold wealth we are going to create, are the constant and always popular themes of politicians. It might not unreasonably be deduced that due preparation is being made for the training of those upon whose labor and skill we must rely for the realization of these great schemes, that technical training is a live part of our national policy and that the rising generations are being induced, persuaded, or, as in the case of Germany, compelled to avail themselves of the facilities and opportunities arranged and provided by a far-seeing Government. But, alas, technical training and Art Schools are still only en Espagne, a locality often by most of us visited, and which is yet, paradoxically, very remote. A smattering of these things is valiantly attempted by the Night classes, which for all greater purposes is rather like growing wheat for the million in window boxes.

The Opportunity for Manufacturers.

That there is ample opportunity for Canadian industries is evident in every store where the consumer finds goods from every corner of the globe, except Canada. My object is to show that success in Industry is, broadly speaking, impossible without equivalent success in certain forms of Art, and this reference to the paucity of Canadian goods in our stores is made to enforce the point, as it may be shown to be due in a great measure to the absence of Art training, so many imported articles finding a sale because they are much more pleasing than our own products. The love of beauty is inherent and universal; those industries which seek to serve this æsthetic instinct secure the trade. The indivisibility of Industry and Art is an unassailable fact which must ultimately receive recognition if this country has the ambition to strive for a place among the commercial powers.

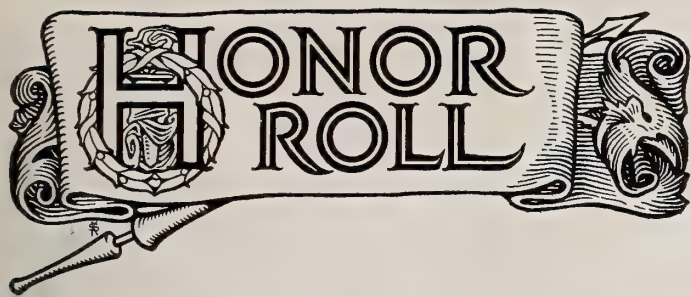


MR. A. McCALL

New Glasgow, N.S., Chairman, Maritime Branch, C.M.A.

The new Chairman of the Maritime Branch of the Canadian Manufacturers Association is Mr. Archibald McCall, of New Glasgow, N.S. Mr. McCall was educated in the New Glasgow High School and Dalhousie College, graduating from the latter with the degree of B.Sc. He then entered the employment of the Nova Scotia Steel Company which had just begun business and remained there for six months as chemist, after which he entered the pattern shop of I. Matheson and Company, New Glasgow. After attending the Massachusetts Institute of Technology at Boston he returned to New Glasgow and again entered the employ of the Nova Scotia Steel Company, where he remained for three years, first as shipping clerk, then as sales agent and for the last six months in connection with the designing and construction of the basic open hearth furnace completed in Canada. He then spent two years with the shipping firm of J. W. Carmichael and Company, and went from there to the City of New York, where he was employed by the Municipal Electric Company of Brooklyn. He returned again to Nova Scotia and took charge of the Canada Electric Company in Amherst, a local company at that time engaged in the manufacture of direct current electric apparatus, and also holding the franchise for lighting the town of Amherst. After spending two years with this company as general manager he returned to the Nova Scotia Steel & Coal Company as Cost Accountant, becoming in 1900 General Accountant and in 1905 Secretary. When the Eastern Car Company was established in 1912 he was appointed Secretary of that company also. He was elected Mayor of New Glasgow in 1908, and for the last two years has been a member of the Town Council. He is a Presbyterian in religion and a Liberal in politics.

Since the reorganization of the manufacturers of the Maritime Provinces last year, when they were combined into one association with headquarters at Amherst, Nova Scotia, greater interest has been taken in matters pertaining to industry. The first chairman, Mr. Douglas, showed great activity and energy, and we believe that the ability and experience of Mr. McCall will be invaluable in pursuing the same policy and in originating new policies which will work to the benefit of the manufacturers in the Maritime Provinces and throughout Canada.



THE following members and managers of Canadian manufacturing concerns now on active military service:

NOTE.—Owing to limitations of space, only members and managers of manufacturing concerns can be included in this list. INDUSTRIAL CANADA will be glad to receive additional names.

Col. Chas. Smart, Smart-Woods, Limited, Montreal.
 Col. John Gunn, Gunns, Limited, Montreal.
 Lieut.-Col. J. Bruce Payne, J. Bruce Payne, Ltd., Granby, P.Q.
 Lieut.-Col. Wm. Hendrie, Hamilton Bridge Works Co., Ltd., Hamilton, Ont.
 Lieut.-Col. J. L. McAvity, T. McAvity & Sons, Ltd., St. John, N. B.
 Lieut.-Col. R. W. Patterson, Winnipeg Paint & Glass Co., Ltd., Winnipeg.
 Lt.-Col. Frank Howard, Brantford Emery Wheel Co., Brantford, Ont.
 Lieut.-Col. A. B. Petrie, Petrie Mfg. Co., Winnipeg.
 Lieut.-Col. G. F. C. Poussette, Assistant Secretary C. M. A., Winnipeg.
 Lieut.-Col. J. J. Carrick, Pigeon River Lumber Co., Port Arthur
 Lieut.-Col. J. A. Currie, M.P., Imperial Steel and Wire Co., Ltd., Collingwood.
 Lieut.-Col. F. C. McCordick, Frank C. McCordick, St. Catharines.
 Lt.-Col. E. W. Rathbun, The Rathbun Co., Deseronto, Ont.
 Lieut.-Col. A. J. Oliver, R. McDougall Co., Limited, Galt, Ont.
 Lieut.-Col. J. F. L. Embury, Canadian Lock Joint Pipe Co., Regina, Sask.
 Lieut.-Col. F. B. Black, J. L. Black & Sons, Ltd., Sackville, N.B.
 Major F. J. Dingwall, D. R. Dingwall, Ltd., Winnipeg.
 Major W. R. Marshall, Standard Fuel Co., Ltd., Toronto.
 Major John McPhee, Barrie Tanning Co., Barrie.
 Major Wm. Scully, Wm. Scully, Montreal.
 Major Kimmins, E. D. Smith & Son, Ltd., Winona, Ont. (Killed in battle.)
 Major T. M. McAvity, T. McAvity & Sons, Ltd., St. John, N. B.
 Major Pelly, Steel and Radiation, Ltd., Toronto.
 Major Russell Britton, Manager Cowan & Britton, Ltd., Gananoque, Ont.
 Major W. R. Turnbull, Robert Duncan & Company, Hamilton, Ont.
 Major J. K. Bertram, The John Bertram & Sons, Ltd., Dundas.
 Major J. R. L. Parsons, Canadian Lock Joint Pipe Co., Regina, Sask.
 Major T. C. Irving, Moffat-Irving Co., Toronto.
 Major P. R. Hanson, Dunlop Tire & Rubber Goods Co., Ltd., Montreal.
 Capt. E. E. Williams, Dunlop Tire & Rubber Goods Co., Ltd., London.
 Captain Trumbull Warren, Gutta Percha & Rubber Co., Ltd., Toronto. (Killed in battle.)

Captain Harvey B. Evel, Evel Casket Co., Ltd., Hamilton.
 Captain W. D. Greer, Consumers Gas Co., Toronto.
 Captain J. T. Duguid, Imperial Steel and Wire Co., Ltd., Collingwood.

Captain F. F. M. Brown, College Press, Ltd., Toronto.
 Captain C. R. Crowe, Crowe's Iron Works, Guelph, Ont.
 Captain Smith, E. D. Smith & Son, Ltd., Winona, Ont.
 Captain F. R. Newman, Canadian Fairbanks-Morse Co., Ltd., Toronto.

Captain J. M. Eakins, Canada Grip Nut Co., Ltd., Montreal, Que.

Captain F. P. Duck, D. Acland & Son, Winnipeg.
 Captain G. H. Weld, Farmers Advocate, Ltd., Winnipeg.
 Captain W. L. Roblin, Winnipeg *Telegram*, Winnipeg.
 Captain R. Steacie, Smart-Woods, Ltd., Montreal. (Killed in battle.)

Captain George D. McLauchlan, McLauchlan & Sons Co., Ltd., Owen Sound, Ont.

Capt. H. C. Trenaman, Domestic Specialty Co., Limited, Hamilton, Ont.

Captain G. F. Grafton, Grafton & Company, Dundas, Ont.
 Capt. R. A. McAvity, T. McAvity & Sons, Ltd., St. John, N.B.

Capt. Victor Nordheimer, The Nordheimer Piano & Music Co., Ltd., Toronto Ont.

Capt. Alexander Campbell, Campbell Steel & Iron Works, Ltd., Ottawa, Ont. (Died of illness).

Capt. Walter A. Harrison, T. H. Estabrook Co., Ltd., St. John, N.B.

Capt. Edgar H. Shuttleworth, J. R. Shuttleworth & Sons, London, Ont.

Captain A. R. Taylor, T. W. Taylor Co., Ltd., Winnipeg.
 Lieut. Harvey Cockshutt, Cockshutt Plow Co., Brantford.
 Lieut. C. H. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Lieut. K. E. Drinkwater, A. B. See Electric Elevator Co. of Canada, Ltd., Montreal.

Lieut. T. E. Ryder, Canadian Fairbanks-Morse Co., Ltd., St. John, N.B.

Lieut. J. V. Young, Hamilton Cotton Co., Ltd., Hamilton, Ont.

Lieut. W. L. McIntosh, Canon Lake Lumber Co., Winnipeg.

Lieut. W. S. Drewry, E. L. Drewry, Ltd., Winnipeg.

Lieut. G. H. Saltmarsh, Metallic Roofing Co., Winnipeg.

Lieut. Wm. Martin, Jr., Manitoba Gypsum Co., Winnipeg.

Lieut. B. M. Green, Smart-Woods, Ltd., Montreal.

Lieut. Jack Woods, Smart-Woods, Ltd., Montreal.

Lieut. Lacey, Steel and Radiation, Ltd., Toronto.

Lieut. Garret, Steel and Radiation, Ltd., Toronto.

Lieut. P. D. McAvity, T. McAvity & Sons, Ltd., St. John, N.B.

Lieut. E. C. H. Moore, Coleman Baking Powder Co., Ltd., Brockville, Ont.

Lieut. Ian Hendrie, Hamilton Bridge Works, Limited, Hamilton, Ont.

Lieut. Geo. C. Wright, E. T. Wright Co., Limited, Hamilton, Ont.

Lieut. W. H. McLaren, McLaren's, Limited, Hamilton, Ont.

Lieut. H. C. Hatch, Canada Steel Goods Co., Limited, Hamilton, Ont.

Lieut. John Galt, Jr., Blue Ribbon, Limited, Winnipeg, Manitoba.

Lieut. R. G. Hutchinson, International Harvester Co., of Canada, Ltd., Calgary, Alta.

Lieut. Donald S. Fisher, Enterprise Foundry Co., Sackville, N.B.

Sergeant Harold Rolph, Rolph and Clark, Ltd., Toronto.

(Continued on page 488).

CENTRAL TECHNICAL SCHOOL OF TORONTO

By DR. ALEXANDER MacKAY

THE new Central Technical School, which was recently taken over from the general contractors by the Board of Education, is central in more senses than one. It is central with respect to the homes of the industrial population of Toronto, central with respect to the great industrial activities of the city, and central with respect to the system of Technical Schools proposed for Toronto.

In this article it is not proposed to give a detailed description of the building, but rather to show how the best interests of all engaged in industrial work may be served in a school with such a magnificent home and equipment.

An investigation of the occupations of the workers of Ontario will reveal the fact that the majority are engaged in industrial pursuits. They are either occupied in manufacturing articles of trade or in selling or exchanging them. More than half of the men in Toronto are deeply concerned all of their days with making things, and their educational interests can best be presented only in a school which has an appreciation of industrial life. The efficient, capable, far-seeing, public-spirited, contented citizen—in short, the educated average man—is not only produced by the study of literature

and history, ancient and modern, as presented in Public and High Schools, but may find his best mental food in the study of the theory and the applications of science, and of the technical processes underlying industrial operations. The lawyer is not educated by the consideration of medical cases, nor the doctor by the study of legal precedents. Each profession finds its best preparation for life's work in the study and comparison of the fundamentals of its own procedure. Similarly the industrial citizen, be he employer or employee, magnate or humble worker, finds his best and most complete preparation in a course of study which includes the technical investigation of some line or lines of his practical work, as well as the so-called English branches which, of course, are fundamental in all educational work.

The Technical School recognizes this position and offers courses which prepare young people for the pursuits of industrial life by including in the curriculum varied practical shopwork and offering special technical training in many industrial operations. For boys, the courses generally extend over four years. The first two years are devoted to study of a general character, including mathematics, electricity, chemistry, English literature and composition, mechanical and art drawing, shopwork in wood and metal, civics and gymnastics. In the last two years the student is expected to specialize along some definite line, and he gives one-half of his time to this special industrial work under the direction of a skilled practical teacher.

To make this possible, and to meet the needs of Toronto with its great variety of manufacturing interests, it is necessary to provide a great range of shops and laboratories. This has been attempted in the new Central Technical School, and a list of the shops alone will indicate the wide field of industrial life which has been kept in view.

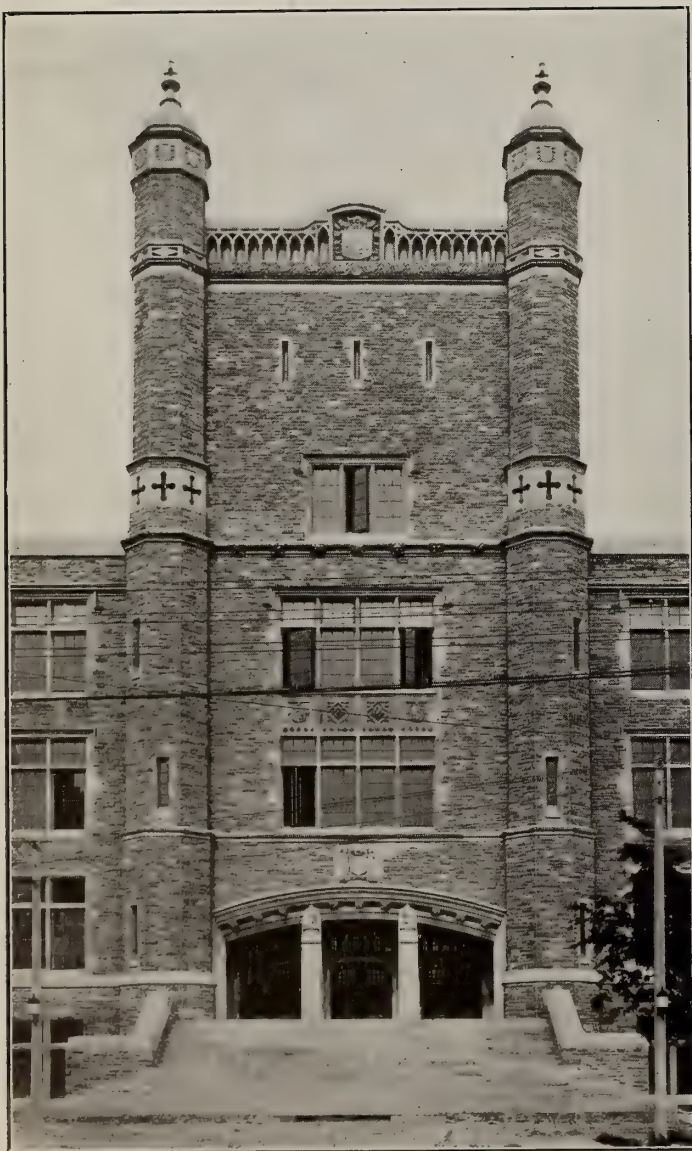
The building trades loom up large in a survey of the industrial life of the city. Consequently the school contains twelve large shops, the smallest 50 feet long and 30 feet wide, presenting the practical work of building construction. Carpenters, masons, bricklayers, cement workers, plasterers, plumbers, steamfitters, electricians, painters, decorators, cabinet makers are all provided for in these shops.

In addition there is a great construction room, 80 feet long, 36 feet wide and 30 feet high, where the school will erect modern buildings, two at one time, with student labor under the direction of the teachers of building construction. The plans will be drawn in the classes in architecture, and the work of estimating, drawing tender forms and tendering will all form class exercises, and will furnish material for practical instruction.

A machine shop, nearly sixty feet square, equipped with engine and precision lathes of the highest grade, a forge room with twenty forges, and a foundry with a cupola of one ton capacity, furnish opportunity for the instruction of metal workers.

The work in clay products is represented in two large shops, one for the teaching of bricklaying and the moulding of brick, tile and terra cotta, and the other for the kilns used in burning these and the Art pottery. The clay products used in the buildings constructed in the great construction room of the school will all be made in the "clay" shops.

The decorating trades are recognized in the plaster and plaster decoration shops, the painting and wood finishing shops, and the designing, decorating and paperhanging rooms.



Front Entrance of the Great New Central Technical School, Toronto, which will be opened for Students on September 2nd, 1915.

The engineering trades are represented in the steam and gas engine laboratory, the dynamo and motor laboratory, the applied mechanics and testing laboratory, and the great power rooms which provide for the heating, lighting and ventilating of the building and for the distribution of power to the shops and laboratories.

The chemical industries are presented in seven great laboratories, admirably equipped for the purpose. Metallurgical processes, photographic and lithographic arts, electroplating and other electro-chemical industries, dyeing, tanning and soap manufacture, and many other related applications of chemistry, are provided for in these rooms.

Architecture, machine drawing and machine design are taught in eight large, perfectly lighted drafting rooms, accommodating three hundred students at one time. Samples of building materials and details of construction work, models and measuring tools, and pictures of great architectural types are abundantly provided, and are kept constantly before the students. A blue-print room, with a rapid printing machine and ironer, makes possible the teaching of large classes interested in the same problem.

Art in its many industrial phases is given a large place in the school. Nine large rooms are assigned to this work, all suitably equipped for advanced as well as for elementary work. Freehand drawing, industrial design, illustration, clay-modelling, sculpture, the manufacture of jewellery, pottery and stained glass, wood carving and china painting, painting with oils and water colors, are all represented under the most favorable conditions.

The printing and publishing interests of Toronto are great; in fact, relatively great, when compared with the work of other large cities of this continent. A floor space, 110 feet by 30 feet, is given to a composing room and a press room, and the equipment of these affords not only opportunity of doing the best work in the instruction of young printers, but enables the school to do work of high grade in its own publications.

In women's special work, ample provision is made for the practical teaching of dressmaking, millinery and cookery. There are five great rooms fitted up for sewing, dressmaking and power machine operating, and two for millinery. Four domestic science kitchens, one with double equipment for cooking by electricity as well as by gas, enables the school to provide simultaneous instruction in cookery for 100 students. A demonstration house, with kitchen, pantry, dining-room, bedroom, closets and hall, furnished as an average home, makes real the teaching of home economics.

In addition to all these special rooms, there are thirty-five class rooms and lecture rooms, a large gymnasium with ad-



DR. ALEXANDER MacKAY

Principal, Central Technical School, Toronto

jacent cadet armory, a swimming pool, twenty-four showers and forty dressing boxes.

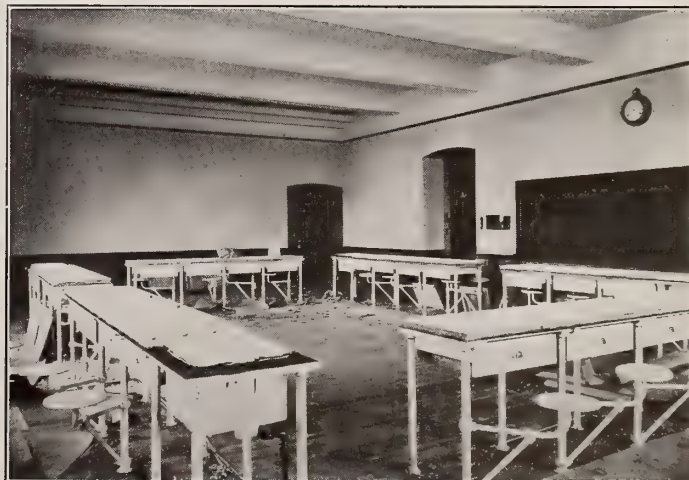
Three rooms are worthy of special mention: the library, with permanent shelving for ten thousand volumes; the exhibition room, where the products of the school will be placed for public inspection; and the auditorium, extending through two stories, with seating accommodation for over thirteen hundred students.

Two assembling rooms are situated near the south entrances, one for men and the other for women. These are mainly for the convenience of evening students who find it necessary to come to the school before the evening classes

(Continued on page 488.)



Auditorium, Toronto Technical School



Domestic Science Kitchen, Toronto Technical School



TRANSPORTATION

By J. E. WALSH

THE most recent legislation in the United States affecting common carriers is the

Cummins Amendment to the Interstate Commerce Act.

It makes them liable for lost or damaged freight to its full value, regardless of any agreement limiting the amount recoverable. The initial carriers are made liable for damages through to destination. The Act says:

"That any common carrier, railroad, or transportation company receiving property for transportation from a point in one State to a point in another State shall issue a receipt or a bill of lading therefor, and shall be liable to the lawful holder thereof for any loss, damage, or injury to such property caused by it or by any common carrier, railroad, or transportation company to which such property may be delivered, or over whose line or lines such property may pass, and no contract, receipt, rule, or regulation shall exempt such common carrier, railroad, or transportation company from the liability hereby imposed: Provided, that nothing in this section shall deprive any holder of such receipt or bill of lading of any remedy or right of action which he has under existing law," be, and the same is hereby, amended so as to read as follows, to wit:

"That any common carrier, railroad, or transportation company subject to the provisions of this Act receiving property for transportation from a point in one State or Territory or the District of Columbia to a point in another State, Territory, District of Columbia, or from any point in the United States to a point in an adjacent foreign country shall issue a receipt or bill of lading therefor, and shall be liable to the lawful holder thereof for any loss, damage, or injury to such property caused by it or by any common carrier, railroad, or transportation company, to which such property may be delivered or over whose line or lines such property may pass within the United States or within an adjacent foreign country when transported on a through bill of lading, and no contract, receipt, rule, regulation, or other limitation of any character whatsoever, shall exempt such common carrier, railroad, or transportation company from the liability hereby imposed and any such common carrier, railroad, or transportation company so receiving property for transportation from a point in one State, Territory, or the District of Columbia to a point in another State or Territory, or from a point in a State or Territory to a point in the District of Columbia, or from any point in the United States to a point in an adjacent foreign country, or for transportation wholly within a Territory shall be liable to the lawful holder of said receipt or bill of lading or to any party entitled to recover thereon, whether such receipt or bill of lading has been issued or not, for the full actual loss, damage, or injury to such property caused by it or by any such common carrier, railroad, or transportation company to which such property may be delivered or over whose line or lines such property may pass within the United States or within an adjacent foreign country when transported on a through bill of lading, notwithstanding any limitation of liability or limitation of the amount of recovery or representation or agreement as to value in any such receipt or bill of lading, or in any contract, rule, regulation, or in any tariff filed with the Interstate Commerce Commission;

and any such limitation, without respect to the manner or form in which it is sought to be made is hereby declared to be unlawful and void: Provided, however, that if the goods are hidden from view by wrapping, boxing, or other means, and the carrier is not notified as to the character of the goods, the carrier may require the shipper to specifically state in writing the value of the goods, and the carrier shall not be liable beyond the amount so specifically stated, in which case the Interstate Commerce Commission may establish and maintain rates for transportation, dependent upon the value of the property shipped as specifically stated in writing by the shipper. Such rates shall be published as are other rate schedules; provided further, that nothing in this section shall deprive any holder of such receipt or bill of lading of any remedy or right of action which he has under the existing law; provided further, that it shall be unlawful for any such common carrier to provide by rule, contract, regulation, or otherwise a shorter period for giving notice of claims than ninety days and for the filing of claims for a shorter period than four months, and for the institution of suits than two years; provided, however, that if the loss, damage, or injury complained of was due to delay or damage while being loaded or unloaded, or damaged in transit by carelessness or negligence, then no notice of claim nor filing of claim shall be required as a condition precedent to recovery."

Written Valuation for Hidden Goods.

It will be observed that after the effective date of the Act, June 3, 1915, any limitation of liability by common carriers subject to the Act is unlawful and void, *but that carriers may require from the shipper a written valuation if the goods are hidden from view*; that in such cases the Interstate Commerce Commission may establish and maintain rates dependent on their value; further, no rule shall prescribe less than 90 days for notice of and four months for filing of claims, but no notice is to be required where the loss, damage or injury was due to delay or damage while being loaded or unloaded, or damaged in transit by carelessness or negligence.

This legislation, particularly in respect to the bill of lading is very similar to the conditions of the domestic bill of lading in effect in Canada which resulted from the negotiations between the Canadian Manufacturers Association, supported by various interests and the railways. Section 2 of this bill of lading reads as follows:—

"In the case of shipments from one point in Canada to another point in Canada, or where goods are shipped under a joint tariff, the carrier issuing this bill of lading, in addition to its other liability hereunder, shall be liable for any loss, damage, or injury to such goods from which the other carrier is not by the terms of this bill of lading relieved, caused by or resulting from the act, neglect, or default of any other carrier to which such goods may be delivered in Canada, or under such joint tariff, or over whose line or lines such goods may pass in Canada or under such joint tariff, the onus of proving that such loss was not so caused or did not so result being upon the carrier issuing this bill of lading. The carrier issuing this bill of lading shall be entitled to recover from the other carrier on whose line or lines the loss, damage, or injury to the said goods shall have been

sustained the amount of such loss, damage, or injury as it may be required to pay hereunder, as may be evidenced by any receipt, judgment, or transcript thereof. Nothing in this section shall deprive the holder of this bill of lading or party entitled to the goods of any remedy or right of action which he may have against the carrier issuing this bill of lading or any other carrier."

Careless Packing of Freight.

Articles have been published from time to time in regard to damage to freight in transit and what should be done to assist in avoiding claims, as a result of which we believe there has been a considerable improvement.

Attention has recently been called to the fact that some of the containers used in the shipment of package of freight via lake and rail routes are not sufficiently strong to safely carry contents under ordinary transportation conditions, and the goods arrive at destination in a damaged condition, resulting in friction between shippers and consignees and claims upon the railways.

It is stated that some of the chief weaknesses of the containers used for such shipments are:—

First—Ends too thin;

Second—Dovetailing of sides fails to hold; account, improper or insufficient glue;

Third—Ends are in two pieces as well as the sides, permitting separation under slight strain and splitting of the boxes in two;

Fourth—Poor stock put together when green, and full of knots and checks.

The railways operating from the head of the Lakes have experienced so much trouble in this respect that they have instructed the Secretary of the Canadian Freight Association, Winnipeg, to notify the boat lines that they will not accept from steamers shipments in insecure packages.

Notice of these instructions have been sent by the Canadian Freight Association to all wholesale houses in the West.

The carriers have the right under the freight classification to refuse to accept shipments in insecure packages. If, therefore, these instructions are carried out it will mean serious delay and inconvenience to all concerned. Shippers who are responsible should see that containers used are sufficiently strong to safely carry contents under ordinary transportation conditions, bearing in mind that shipments moving all water or lake and rail are subject to additional handling in transit.



Canadian Phoenix in Liquidation.

THE Canadian Phoenix Fire Insurance Company, which operated principally in the West and had its head office in Brandon, has gone into voluntary liquidation, the former managing director being appointed provisional liquidator. We understand that the liability of the company in respect of policies in force on the 1st of June has been reinsured by the London Mutual Fire Insurance Company.

Hamilton Fire Insurance Company Absorbed.

It is announced that the Liverpool, London & Globe Insurance Company has acquired control of the Hamilton Fire Insurance Company, which is a Canadian company, and has hitherto operated independently of the Canadian Fire Underwriters' Association. It is probable that the Hamilton will henceforth operate on tariff lines, its policies being guaranteed by the parent company.

Fire Losses in Canada.

According to an estimate compiled by the *Monetary Times*, the loss caused by fire in Canada during the month of May amounted to \$821,855, as compared with \$1,463,747 for April and \$1,935,516 for May, 1914. For the first five months of 1915, the loss throughout Canada amounted to \$6,136,640. Tabulated according to loss by provinces, Ontario heads the list for the first five months with \$2,644,140, more than a third of the total.

To Prevent Over-Hasty Payment of Fire Losses.

Chapter 78 of the laws of the State of Maine, 1915, entitled "An Act relating to the adjustment and payment of fire losses by insurance companies," provides that after receiving legal notice of a loss, the company or its representatives shall begin adjustment of the loss within twenty days, and further provides that no loss in excess of one hundred dollars

shall be paid until forty-five days after receipt of legal notice, except for sufficient reason the insurance commissioner may issue permit to pay sooner.

Life Companies' War Claims in Canada.

Up to the first of June, the total claims made in Canadian life insurance companies in respect of soldiers who have lost their lives in the war amounted to approximately \$600,000. The Canada Life Assurance Co. paid the largest proportion of this amount, having received claims totalling \$123,000. The Sun Life follows with \$90,822, and the Great West Life comes third with \$88,178. These claims are naturally only in respect of the first Canadian contingent and such reservists who left Canada to join the Imperial forces in England. It is inevitable that the losses will very greatly increase as more of Canada's men reach the firing line. It must also be remembered that the above figures are for actual claims only. A large number of men have been reported missing of whom many must have died, so there is no possible way of arriving at the companies' actual losses.

Age of Car Must Be Correctly Given.

More than one case has recently been tried in the United States in which an insurance company has refused to pay a fire loss under an automobile policy for the reason that the age of the car was misrepresented by the assured. In every case the contention of the insurance company has been sustained by the court, it being held that the misrepresentation was "material to the risk." It is impossible for insurance agents to ascertain the age of a car from its outside appearance, while, in the case of a car having been purchased second-hand, the assured himself may be under a misapprehension as to the date of manufacture. Nevertheless the law appears to throw the onus on the policyholder and considers that the statement of the year of manufacture in the application or policy constitutes a warranty on the part of the assured.

Fire Protection Campaign.

At the annual meeting of the National Fire Protection Association, the Edison fire was cited as a lesson that large industrial buildings, even if built of cement and steel, must be subdivided by fire walls and must have adequate means of stopping fires in their incipency. The Association advocated the adoption of ordinances requiring the construction of fire division walls, not only as a property protection device, but as providing the best life-saving exit facility. Resolutions were also passed advocating, among other things:—

The establishment by law of a Fire Marshal in every State, who shall not be a mere political office holder, but a trained man with trained assistants, competent to direct the work as statistician, educator and prosecutor.

The investigation of the cause of all fires by public officials, and the enactment of laws fixing personal liability for damage resulting from fires due to carelessness or neglect.

The universal adoption and use of the safety match.

Regina's Good Record.

Regina's remarkably low fire losses since the introduction of the motor fire-fighting apparatus has attracted widespread attention. The report of the Fire Chief covering the year 1914 shows that the per capita fire loss is 90c. This figure is based on an estimated population of 43,000, although the official city estimate is 50,000. The figure above quoted compares very favorably with some cities in the British Isles, and is far and away ahead of many of the Canadian cities and those of the United States. It might be well if some of our eastern cities and towns would pattern by Regina and seek

to lessen fire waste year by year. For the whole of Saskatchewan, the per capita fire loss for 1914 works out at \$2.22. The total number of fires occurring in the Province was 966, resulting in a loss of \$1,500,000 and forty-four fatalities. The Fire Commissioner says in his report: "The fire loss can without question be greatly reduced if the people will only use care and diligence. Often great fires occur simply and solely because of negligence and recklessness."

Fire Insurance Unprofitable in United States.

According to statistics presented at the annual meeting of the National Board of Fire Underwriters, recently held in New York, fire insurance business in the United States in 1914 resulted in an underwriting loss to the companies of 4.21 per cent. It was pointed out that, notwithstanding the unprofitable condition of the business, the ratio of taxation on insurance premiums was steadily increasing, and that the taxes exacted increased from \$8,501,927 in 1913 to \$9,120,508 in 1914. The figures showed that the premiums collected during 1914 fell short by 4.21 per cent. of meeting losses and running expenses, and companies were only enabled to pay dividends by the interest collected from invested assets. The volume of premiums paid to 191 companies throughout the United States reached \$383,647,016, an increase of about \$9,000,000 over 1913, while the losses incurred were \$200,720,782, an increase of nearly \$28,000,000. In presenting the statistics, President Kremer said: "It is easily seen that, with the agitation for reduced premiums and increased taxation, and with no apparent diminution in the fire waste of the country, the fire insurance underwriters have not an easy problem before them."



By J. R. K. BRISTOL

Board of Customs Decisions.

THE Board of Customs met in Ottawa on Tuesday, July 13th, and the Association's tariff officer reports the following decisions as having been rendered by the Board on appeal:

1. Babbit's Cleanser, per sample, containing 2½ per cent. soap, declared to be dutiable under tariff item 252.
2. Warnock's Adjustable Aluminum Bases, per sample, for electrotypes, declared to be dutiable under tariff item 433.
3. Balopticons, stereopticons, etc., may be entered free of duty when imported for use as provided in tariff item 696, provided the selling price of the articles by retail in Canada be not less than \$25—in effect from 1st April, 1915.
4. Custard powders, not containing sugar, declared to be dutiable under tariff item 141.
5. Metropolitan Life Insurance Literature, viz., "Intelligencer," published twice a month and distributed to agents; pamphlets, such as "The Visiting Nurse, Servia," "Diphtheria," and the like:—The above declared to be dutiable under tariff item 171, as periodicals and pamphlets n.o.p.

The above decisions have been issued to Collectors of Customs in Appraisers Bulletin No. 1143.

Trading With the Enemy.

The Commissioner of Customs has instructed collectors of customs as follows:—

Referring to Memos 1817, 1837 and 1862 in regard to trading with the enemy, you are advised that importations into

Canada of skins and coffee from Turkish Arabia via Aden may be dealt with as goods to which no suspicion of enemy origin attaches.—Issued at Ottawa, July 8, 1915.

Customs Rulings.

Smith Motor Wheels. Item 438.

Crushed stone, the product of stone crushers. Item 711.

Inland Revenue Ruling.

In regard to raw leaf, any licensed tobacco manufacturer may obtain a permit by which a portion of his licensed premises may be partitioned off from the remainder of the factory for the manufacture, in bond, of tobacco intended for export. The fee of \$300 prescribed in Section 250 of the Inland Revenue Act applies; but as a rule no extra charge will be made for officers' supervision.

Claims on Enemy Subjects.

(From the Birmingham Chamber of Commerce Journal).

Attention is drawn to the following letter addressed to an enquirer, on the 19th April, 1915, by the Assistant Secretary, Commercial Department, Board of Trade, concerning the treatment, in the terms of peace, of private British claims on enemy countries. Special attention is drawn to the concluding paragraph of the letter:—

"I am directed by the Board of Trade to state that they understand from the Foreign Office that, in the normal course, on the restoration of peace, claims by British firms against

private individuals in enemy countries for debts detained, or for goods obtained and not paid for, will revive, and will be recoverable in the usual manner through the ordinary courts of law, either in the United Kingdom or the enemy country, as the case may be. With regard to private property confiscated by the German Government itself, it would appear that such property would, unless specially provided for in the treaty of peace, be permanently lost to its former owners. It is, of course, impossible at the present time to foresee the terms which His Majesty's Government may be in a position to insert in this treaty; but it may be hoped that it will be possible to provide for the payment of due compensation by the German Government to all persons who can produce proof of having suffered losses in this manner through the action

of the German authorities. Similar observations would apply to debts cancelled by legislative enactment, should any such action be taken by the German Government. I am to add that all claims against the German Government should be communicated to the Foreign Office, at which department a record of such cases is being kept. I am, Sir, your obedient servant,
"H. FOUNTAIN."

The Chamber is authoritatively informed that what the Foreign Office is keeping is a record of claims against the German Government in case of destruction or confiscation of property by order of the Government. The Foreign Office is not keeping any register of debts between individuals. All communications should be addressed to the Under-Secretary of State, Foreign Office, London, S.W.

LEGISLATION

By F. W. WEGENAST

THE new Act of the Province of Saskatchewan "Respecting the Sale of Farm Implements" with its ancillary legislation, consisting of three separate Acts "An Act respecting Homesteads," "An Act to amend The Land Titles Act," and "An Act to amend The Exemptions Act," constitutes in some respects one of the most remarkable pieces of legislation ever attempted by any legislative body. The main Act applies to "implements" which are defined to include "any and every implement or machine used or intended for use upon any farm, and shall include all engines, threshing machines, ploughs, binders and mowers." Implements are divided into "large implements" and "small implements." Large implements are defined to "mean and include traction and portable engines of any kind for the production of power upon farms, grain separators, engine ploughs and engine discs, and any other implement that may be declared by the Lieutenant-Governor-in-Council to be a large implement within the meaning of this Act." Small implements are defined to "mean and include mowers, binders and generally all farm implements other than" large implements. Vendor means "any person or Company selling or offering for sale implements on his or its own account."

Returns of the Government.

The Act provides that all vendors of large implements shall file with the Minister of Agriculture on or before the first day of February of each year a list of the large implements which they have for sale with a description of the implement, amount of horse-power required, etc., and state the price at which the implements are sold at retail for both cash and on credit and the usual terms of credit and rate of interest charged. Vendors of small implements are also required to file lists of implements with prices and terms. All vendors shall also file with the Minister annually a list of all "repairs" "stating the cash selling price thereof and the places in Saskatchewan where the same may be purchased."

A penalty of \$25.00 is imposed for charging a higher price for cash for any repair than the price stated in the list. No contract for the sale of a large implement shall be valid and no action is to be taken in any court for the recovery of the whole or part of the purchase price unless the contract is in a form set out in the Act. Forms are also provided for contracts for the sale of small implements and second-hand implements.

Payments on farm machinery, whether due under the contract or under any note given thereon may be paid to the

agent of the vendor from whom the machine was purchased or to any other sales or collection agent of the vendor in Saskatchewan, and the receipt of such payment by such agent shall be deemed to be receipt by the vendor; though it is provided that the "vendor may at any time notify the purchaser in writing by registered mail of the name and address of the vendor's agent or agents in Saskatchewan, to whom such payments may be made, and thereafter all such payments shall be made to such agent or agents only."

The vendor is to have a lien on the implement for the unpaid purchase money "only in the event that such lien is specified in a 'lien note' taken for the purchase price or balance of the purchase price thereof." The Act itself sets forth a variety of terms and conditions which are to apply in case a 'lien note' is taken. The forms of contract provided by the Act contain a large list of express warranties on the part of the vendor, together with certain agreements on the part of the purchaser.

It is safe to say that nothing approaching the character of this legislation has ever been attempted, at all events in Canada, before. Ordinarily a man can sell any goods or chattels which he owns subject to such restrictions as those governing the sale of intoxicating liquor. The question of the terms of sale, price, etc., is uniformly determined by the parties themselves. A man owning a binder or a plough can sell it to his neighbor or to a customer in his own or any other jurisdiction. This Act provides that a man in Saskatchewan can not sell a binder to his neighbor unless he files with the Minister of Agriculture a list of the implements which he has for sale. For no attempt is made, it will be noted, to confine the operation of the Act to (Eastern) manufacturers or dealers. In the nature of things such a distinction would be difficult if not impossible.

Application of Act.

The Act applies "to the sale of all implements in Saskatchewan." Suppose a Saskatchewan farmer or even an implement dealer sells an implement to be shipped into Manitoba or Alberta: here the Act would apparently apply. Suppose manufacturers of agricultural implements introduce the practice of making their sales outside the Province, say at Winnipeg: here the Act would apparently not apply. Again, the Act would seem to apply to any wholesale transaction taking effect in the Province of Saskatchewan. Suppose the Massey-Harris Company sold out to the International

Harvester Company all its stock in the Province of Saskatchewan. The sale of each implement would have to be made in accordance with the forms of contract embodied in the Act. These instances merely begin to illustrate the absurdities which logically follow from the Act.

There is the utmost confusion as to the understanding and operation of contracts of conditional sale or "lien notes." The draftsman of the Act could not have had before his mind any conception of the terms usually embodied in what is popularly called a "lien note." As a matter of fact, the term lien note is an entire misnomer and has no correct legal significance notwithstanding its being included in a Provincial enactment. It is inconsistent with the essential nature of a "note" under the Bills of Exchange Act that it should embody the conditions usually included in what is called a lien note. In other words a lien note is not a note but a contract. Ignoring this, and ignoring the fact that a lien note implies that conditions are embodied, the draftsman set out in full himself the terms which shall apply "where the vendor takes a lien note." Then in the forms of contract, which are to be used whether a lien note is given or not, further and other terms are set out at length.

The Warranties of the Act.

The warranties as embodied in the forms are amongst the most important provisions of the Act. The vendor warrants that the machinery is well made and of good material. He warrants that the machinery will perform the work for which it is intended if properly used and operated. He warrants that the machinery will be durable if used and kept with proper care. He agrees to replace parts proving defective in workmanship or material free of charge; and if the purchaser has to pay for any such defective parts within the period he may claim credit for the same on any note or notes due to the vendor. The vendor also warrants that all necessary repairs will be kept at a stated place in Saskatchewan and that at that place the purchaser will be able to obtain them within a reasonable time.

In the case of engines and threshers additional warranties are provided as regards the amount of horse-power to be produced or consumed.

One pertinent question which will be raised sooner or later on legislation of this class is whether the provinces have under the British North America Act the power to regulate trade to the extent necessary for the operation of such a statute. Trade and commerce means buying and selling. Buying and selling implies the power to bargain as to terms, price, etc. In the cases that have come before the Privy Council respecting the sale of liquor, Provincial laws have been upheld on the ground that they are aimed not at trade and commerce but at a specific article of commerce which was deemed to be deleterious and a proper subject for control on that account. Would the same reasoning be applied in the case of the statute in question.

A movement has been initiated for the purpose of attaining some degree of uniformity in Provincial laws, particularly those governing trade and commerce. It has been urged that one of the first and most likely subjects for uniformity would be that of Conditional Sales Legislation. An Act such as the Farm Implements Act of Saskatchewan, if adhered to, would be an insuperable obstacle to uniformity in this class of legislation, and unless the idea of uniformity is abandoned entirely it would be necessary to invoke legislation by the Parliament of Canada. There can be no reasonable doubt that the Dominion would have power to pass a Sale of Goods Act for the regulation of commercial transactions throughout Canada and the persistence of the provinces in setting up barriers to legitimate trade will inevitably hasten such legis-

lation. It would be an intolerable condition if each province undertook to regulate the terms of commercial transactions within its own boundaries.

CENTRAL TECHNICAL SCHOOL OF TORONTO.

(Continued from page 483.)

begin. There is a store between the two rooms where supplies needed by students are sold at cost.

There are also two lunch rooms, with a serving kitchen between, where three hundred and fifty students at one time may eat the lunch brought from home, and may supplement it with hot soup or cocoa at an expense less than the cost of street railway ticket.

The courses of the school and the building and equipment provided are a definite recognition of the fact that the majority of the citizens of Toronto are engaged in, and dependent on, the manufacturing interests of the city, and of the further fact, not always recognized, but undoubtedly true, that education is not confined to the study of books, but in the fullest sense may be obtained from the handling of the combined products of man and nature.

MR. BURY OPTIMISTIC.

In an interview published recently in the press, Mr. George Bury, Western head of the Canadian Pacific Railway Company, said:

"Never was the Western farmer more free of pressing debts than he is to-day. Loan and trust companies have thousands of dollars in their vaults in Winnipeg awaiting investment in farm mortgages and they cannot place it. The Western farmer will have more money this fall with which to purchase necessities and luxuries than he ever had before. The wholesaler and the retail merchant will probably find that they have enormously underestimated the purchasing power of the farmer. . . . There is no need for so many clouded brows. Three years ago we were full of confidence and hope. Why? Because of our resources, particularly those of the soil. Have they been dissipated? No; on the contrary, they are worth more than in 1912. More and more the farmer has gone in for the raising of stock and for mixed farming, the practice of which spells permanent prosperity. Everywhere you go he is gathering about him a few cattle and some hogs. No longer does he buy the meat for his household. He has it to sell on the hoof. No longer does he buy New Zealand butter. He has butter and cream to sell. When he wants a little fruit, he no longer sends to Washington or Oregon to pay for it. He buys it from his brother in Eastern Canada, the Okanagan and the Kootenays. All these things make for economic strength and soundness. We are approaching economic independence."

HONOR ROLL.

(Continued from page 481.)

Sergeant W. A. Logie, Smart-Woods, Ltd., Winnipeg, Man.
Corporal A. R. Ackerman, B. F. Ackerman, Son & Co., Peterboro.

Corporal Stewart L. Young, Young-Thomas Soap Company, Regina, Sask.

Pte. Murton Rugg, E. W. Rugg Co., Winnipeg.

Arthur H. Coles, Edmonton Law Stationers, Ltd., Edmonton.

Pte. A. C. Bertram, The John Bertram & Sons Co., Ltd., Dundas.

Pte. Norman V. Cliff, Toronto Salt Works, Toronto.

Pte. Alex. G. Rosamond, Rosamond Woolen Co., Almonte, Ont.



How Long is it Since You Had a Written Report on your Power Plant?

PERHAPS you feel that your power plant is giving full efficiency. Perhaps it is, but how long is it since you had a definite written report, compiled by power experts whose knowledge keeps pace with the latest developments in power production and delivery?

Such a written report is something that, normally, you don't get unless you ask for it. Wouldn't it be interesting and valuable to know—without cost—just what you are paying for your power—how much is being used—how much wasted—and why—and how to reduce the loss?

That's exactly what the Hydro staff of engineers stands ready to do for you. Dollars are too useful now-a-days for you to stand for any waste in your power plant. Of course, calling us in in this way does not commit you to any expense or obligation. Remember that. Now for the 'phone.

We are at the end of your telephone wire

Toronto Hydro-Electric System

226 Yonge Street

Phone Adel. 2120

TRADE OPPORTUNITIES IN RUSSIA

Special Commissioner Publishes Extensive Report

AS the possibility of selling goods to Russia has been occupying the attention of Canadian manufacturers for some time, the statement of Mr. C. F. Just, Special Trade Commissioner of the Dominion Government, who has been sent to investigate conditions in Russia, will be of interest. In his report to the Trade and Commerce Department, he says:

"There is to be found in Russia, therefore, the unusual conditions of great opportunities for industrial enterprise for which the consuming power is at hand, side by side with opportunities for imports on an extensive scale, with the certainty that the former will rather stimulate than retard the growth of the latter both in variety and extent; for with the slightest rise in the standard of comfort of such a large population the home industries can hardly expect to meet the demand, at least not for a great many years. Primarily these factors should make Russia a great market, and if the conditions be rightly studied and understood Canadian manufacturing industries by the nature of their products which are adapted in so many instances to the requirements of a developing country like Russia, may reasonably expect to participate in the trade with that market."

Need for Organization.

Mr. Just is of the opinion that Russia is no place for the single firm which desires to run independently and claims that this is also the opinion of the authorities whom he consulted. These authorities advocate the plan of associated groups or syndicates of powerful firms, whose products do not compete but are complementary to each other, entering the market. He points out that under these conditions the expenses for each participator will be considerably lighter in every direction and the work of building up an efficient organization in the chief centres will be greatly facilitated. Petrograd is the social and economic centre of Russia and the extreme centralization of government must be taken into account. Scarcely anything of importance is settled without reference to the Government and commercial organizations which are grouped in the capital. Mr. Just says that Canadian firms should go to Petrograd for their initial business arrangements, whether they establish themselves through—

1. The existing merchant houses in the Russian trade in Great Britain, which have long had their trade connections throughout Russia.
2. Through sole buying agents who guarantee accounts.
3. Simple local agents, Russian and English, selected for their trustworthiness and capacity.
4. Branches of the parent houses in Canada independently or in the grouped or syndicate form.

In regard to transportation, unless a Canadian line be inaugurated, Mr. Just suggests that suitable arrangements with such existing lines as the East Asiatic Steamship Company which serves Libau, Riga and Reval and calls at present at Halifax, N.S., and the Russian American Steamship Company might be considered. Transshipments in London by way of the existing English services of the United Shipping Company, Wilsons of Hull, etc., or of new lines in Great Britain, may offer alternatives.

Mr. Just gives the following list of goods formerly manufactured by German firms now in demand in Russia:

Agricultural machinery and implements.
Aluminium cooking utensils.
Asbestos.

Ball bearings.
Bicycles and bicycle accessories.
Blades for cold saws.
Blowers—
 Sandblast apparatus.
Boat motors.
Boats, motor.
Boiler fittings—
 Steam slide valves.
 Blow-off cocks.
 Steam pipe isolating valves.
 Water level indicators.
Boot polishes.
Boots.
Brushes for dynamos—
 Carbon brushes and contacts.
Brushes, hair, tooth, clothes.
Calculating machines.
Cash registers.
Cellulose factories, installations for—
 Woodgrinding plants.
 Machinery for pulp manufactures.
Chains—
 Galle chains.
 Link chains.
Chamot fabrics.
Chemicals.
Chucks for lathes.
Circular saws.
Combustion engines, internal.
Cotton goods.
Crude oil engines.
Cutlery and steelware.
Cutters, milling.
Docks, floating.
Drawing ink.
 " instruments.
 " paper.
Dredgers.
Dressing plants.
Drills and drilling tools.
Drugs.
Dry dredgers.
Duplex pumps.
Dynamo governors.
Dynamos.
Economisers.
Edge mills.
Electrical apparatus.
Electric lighting accessories.
Electrical machinery.
Electric measuring instruments.
 " railway installation.
 " tools and articles.
 " welding and cutting installations.
Electricity meters.
Electro-motors.
Emery.
 " wheels.
Enamelled ware.
Engines, fire.

(Continued on page 492.)

EQUIPMENT FOR TECHNICAL SCHOOL

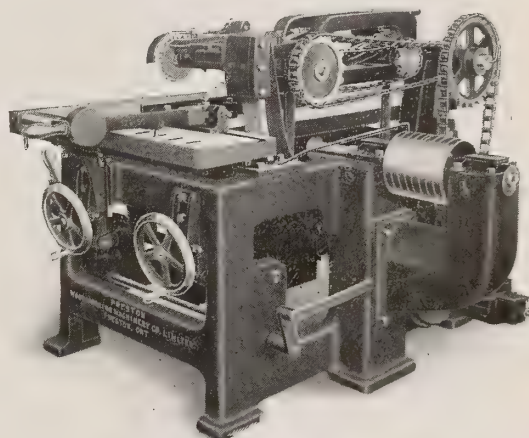
IN the equipment of Toronto's new million and a half dollar Technical School the best that could be obtained was alone considered.

Every machine that was installed was the newest and best. The intention was to make the thousands of boys and men who will go through the school each year familiar with the latest developments in industrial practice.

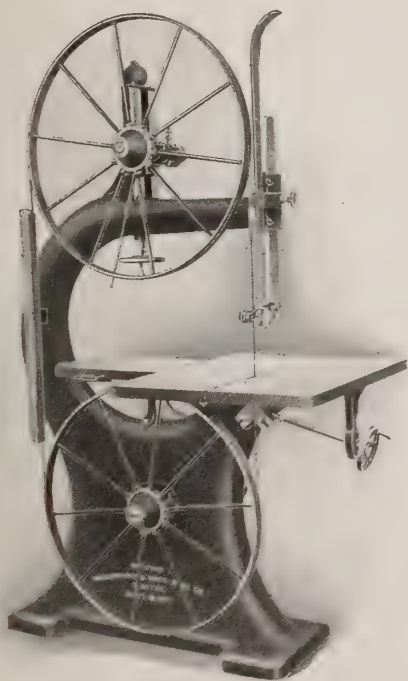
We, The Preston Woodworking Machinery Co., Limited, are very glad to state that we have been called upon to provide considerable of the Woodworking Machinery required for this fine new Technical School. This, in itself, we consider to be excellent proof of the quality of the machines we manufacture. As well, our machines have stood the test of the biggest shops in Canada. They are produced by the most skilled labor in Canada. Their design is the result of years of experience.

Some of the Machines Supplied

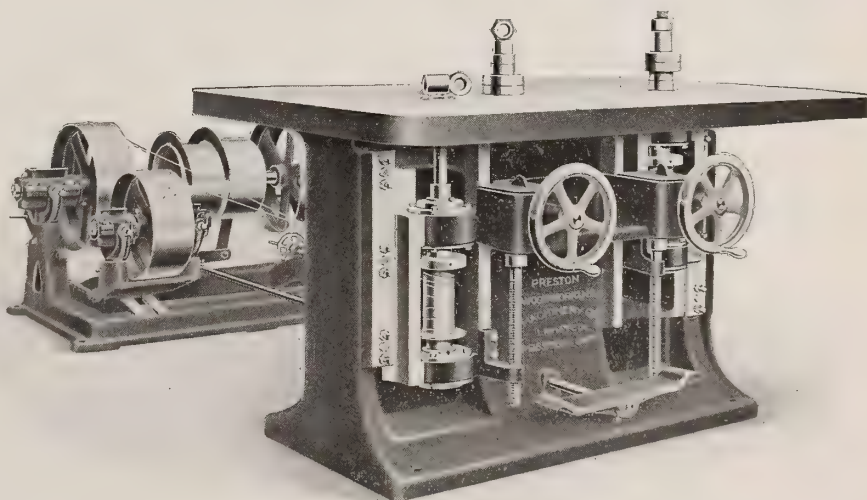
As well as the 3 machines shown here, we have supplied the School with Manual Training Lathes, Sander, Rip Saws, Cut Off Saws, Buzz Planer and Jointers. All these machines are Motor Driven, and we have made a specialty of this style of drive.



No. 129 POWER FEED RIP SAW
Frame One Solid Casting.



No. 132-36 IN. BAND SAW
With all Steel Wheels.



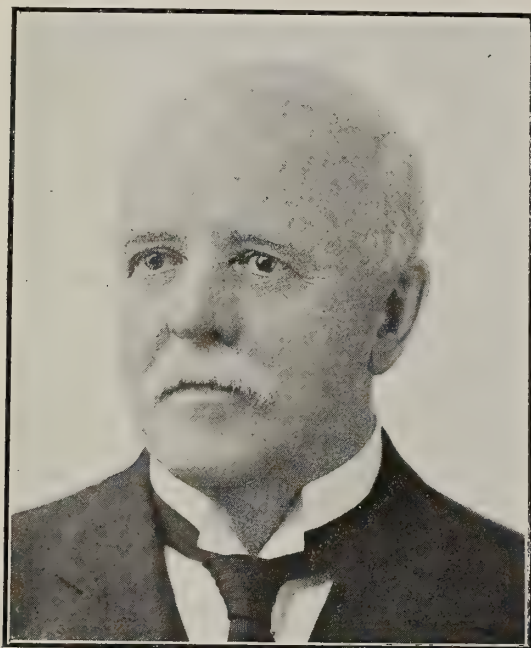
No. 162 HIGH SPEED BALL BEARING SHAPER
First Ball Bearing Shaper made in Canada.

Write to us for detailed information.

THE PRESTON WOODWORKING MACHINERY CO., Limited
PRESTON ·· ONTARIO

MR. JOHN F. ELLIS.

The new chairman of the Transportation Committee, Mr. John F. Ellis, managing director of Barber-Ellis Company, Limited, Toronto, has been manufacturing in Canada for nearly forty years, having established the present business with Mr. John R. Barber in 1876. He is well known in indus-

**MR. JOHN F. ELLIS**

trial circles as a former president of the Canadian Manufacturers Association, and through his faithful services on council and on the various committees of the Association. Mr. Ellis acted as president of the Toronto Board of Trade, 1902-1904; was president of the National Club, Toronto, 1901-1902; he was one of the founders of the Commercial Travelers Association, and was delegate to the Sixth Imperial Trade Congress in London, England, in 1906. His chief recreation is fishing, which he indulges as a member of the Caledon Fishing Club, where he acted as president, 1903-1905.

The transportation situation is one of the most serious problems now confronting the people of this country, and when the onerous duties which are associated with the chairmanship of the Transportation Committee were laid down by Mr. S. R. Parsons, after an exceptionally brilliant tenure of the office, there were few, if any, as well qualified as Mr. Ellis to take them up.

MR. GRIFFITH B. CLARKE.

Mr. Griffith B. Clarke, following the death of his father, the late Mr. A. R. Clarke, as a result of the *Lusitania* disaster, has been elected Vice-President and Director of A. R. Clarke & Company, Limited, Toronto, thereby becoming in direct succession the third Clarke in control of the business. It

**MR. GRIFFITH B. CLARKE**

was founded in Peterborough by his grandfather, John Clarke, in 1852, and was taken over by his father, A. R. Clarke in 1877, and moved to Toronto in 1882. The company was incorporated under the present name in 1899, Mr. A. R. Clarke becoming President.

Mr. Griffith B. Clarke, though a young man, has been associated with the business for eight years, and is familiar with its various departments. He has been active in various sports and is president of the hockey, baseball and bowling teams playing under the name of the company. He served as a private in the Queen's Own Rifles, Toronto, for three years, and last fall, after the outbreak of war, he qualified for a commission, and is now attached to the Royal Grenadiers Regiment, Toronto.

Manufacturers would have preferred that Mr. Clarke had received his business promotion under less tragic circumstances, but, nevertheless, will unite in wishing him success and in expressing confidence in his ability to attain it.

LABOR ORGANIZATION IN CANADA, 1914

THE fourth annual report on Labor Organization in Canada, containing 238 pages, embodying statistics, etc., for the calendar year 1914, has been issued by the Department of Labor.

Many will find a special interest in the chapter containing a discussion of the bearing of the European war on various aspects of trade unionism, which includes also the text of deliverances of representative labor organizations in different countries with respect to war in general or having special reference to the present war. Figures are printed showing the number of members of trade unions, who, to the close of the year 1914, have as recruits or reservists gone to the front from Canada. The trade unions furnished in all 3,498 recruits and 417 reservists, these figures not including recruits joining the forces since January, 1915.

The effect of the war on Canadian trade union growth is shown in a decrease of membership, the loss being 9,636. The estimated numerical strength of organized labor in Canada

(Continued on page 490d.)

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Highest Banking and business references.

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**WHITE VICTORIA
LAWNS**

WHITE NAINSOOKS

and

DYED COTTONS

OF EVERY DESCRIPTION

LABOR ORGANIZATION IN CANADA, 1914.

(Continued from page 490b.)

at the close of 1914 stood approximately at 166,163. The membership for each of the past four years, as reported to the Department, has been as follows:

1911	133,132
1912	160,120
1913	175,799
1914	166,163

The membership for 1914 of international organizations operating in Canada was 140,482, members of non-international bodies numbered 20,935, and 4,746 belonged to independent unions.

The decrease in international membership was 9,095, and in independent unions of 1,261, while the non-international membership shows a gain of 720. At the close of the year 1914 there were 2,003 local branch unions in Canada, 1,174 owing allegiance to international organizations, 196 affiliated with non-international bodies, and 33 independent unions. These figures show a reduction of 18 in local branches of international organizations, a loss of one in independent units, and a gain of five in non-international branches, making a total decrease of 14 in the number of local union branches in the Dominion.

Organized Labor in Canadian Cities.

In twenty-five of the cities more than one-half of the local unions of the country are located, and among them they comprise nearly 40 per cent. of the entire trade union membership in the Dominion. Montreal stands in first place as to the number of local branches, but Toronto reports much the largest membership. The following summary gives the names of the cities, number of unions in locality, number of unions reporting membership, and the membership reported:

CITIES.	Number of Unions in locality.	Number of Unions reporting membership.	Number of Members reported.
Montreal	126	43	8,439
Toronto	123	62	14,781
Winnipeg	80	40	6,693
Vancouver	69	34	5,165
Ottawa	59	33	3,262
Hamilton	53	32	2,684
Edmonton	44	23	2,037
London	43	17	1,587
Calgary	43	26	2,524
Quebec	40	17	2,630
Victoria	40	25	1,589
Fort William	30	14	775
St. John	29	14	980
Saskatoon	28	20	852
Halifax	27	11	1,386
St. Thomas	26	14	1,377
Regina	25	19	955
Moncton	24	12	1,640
Moose Jaw	24	13	944
Brandon	23	16	677
Lethbridge	23	17	862
Brantford	22	9	403
Windsor	22	7	178
Peterborough	21	10	427
Nelson	20	9	300
Totals	1,064	537	63,147

TRANSCONTINENTAL LINE OPENS.

With the opening of the Canadian Government Railway line, The Transcontinental between Cochrane and Winnipeg, it has opened up another gateway to Winnipeg and the North-West, and one which we feel sure will be appreciated by those doing business in Winnipeg and the North-West. The new route via Grand Trunk to North Bay, Ontario Government Railway, T. & N. O. North Bay to Cochrane, Canadian Government Railway, Transcontinental, Cochrane to Winnipeg, was opened under exceptionally favorable circumstances. The first train which was run by the new route consisted of forty cars, with a total of nearly 1,400 tons, and made exceptionally fast time. Train left Toronto on the night of the 23rd of July and arrived in Winnipeg morning of the 27th, 10.40 a.m., ten hours ahead of schedule time. We think that the new line is to be congratulated on this most auspicious opening event, and it is confidently expected that it will receive the cordial support of the manufacturers and merchants.

Every dollar paid to the Canadian Government Railways is a dollar saved to the country.

PATRIOTIC WEEK IN WINNIPEG.

The "Patriotic Week," held in Winnipeg during July, was a great success and reflected credit upon those who originated the idea and carried it out. One of the features of the monster parade was the section of floats and decorated vehicles of the manufacturers of the city, which occupied about one and a half miles of the procession.

HOW A MANUFACTURING CONCERN REDUCED THE CONSUMPTION OF COTTON WASTE.

The working value of any cotton waste depends upon the life cleanliness and absorbing qualities of thread stock from which it is made. For this reason a low-priced waste in the long run is expensive. But high-priced waste is no better cared for than the cheaper grades in the ordinary factory, and this alone makes it necessary to watch consumption all the more closely.

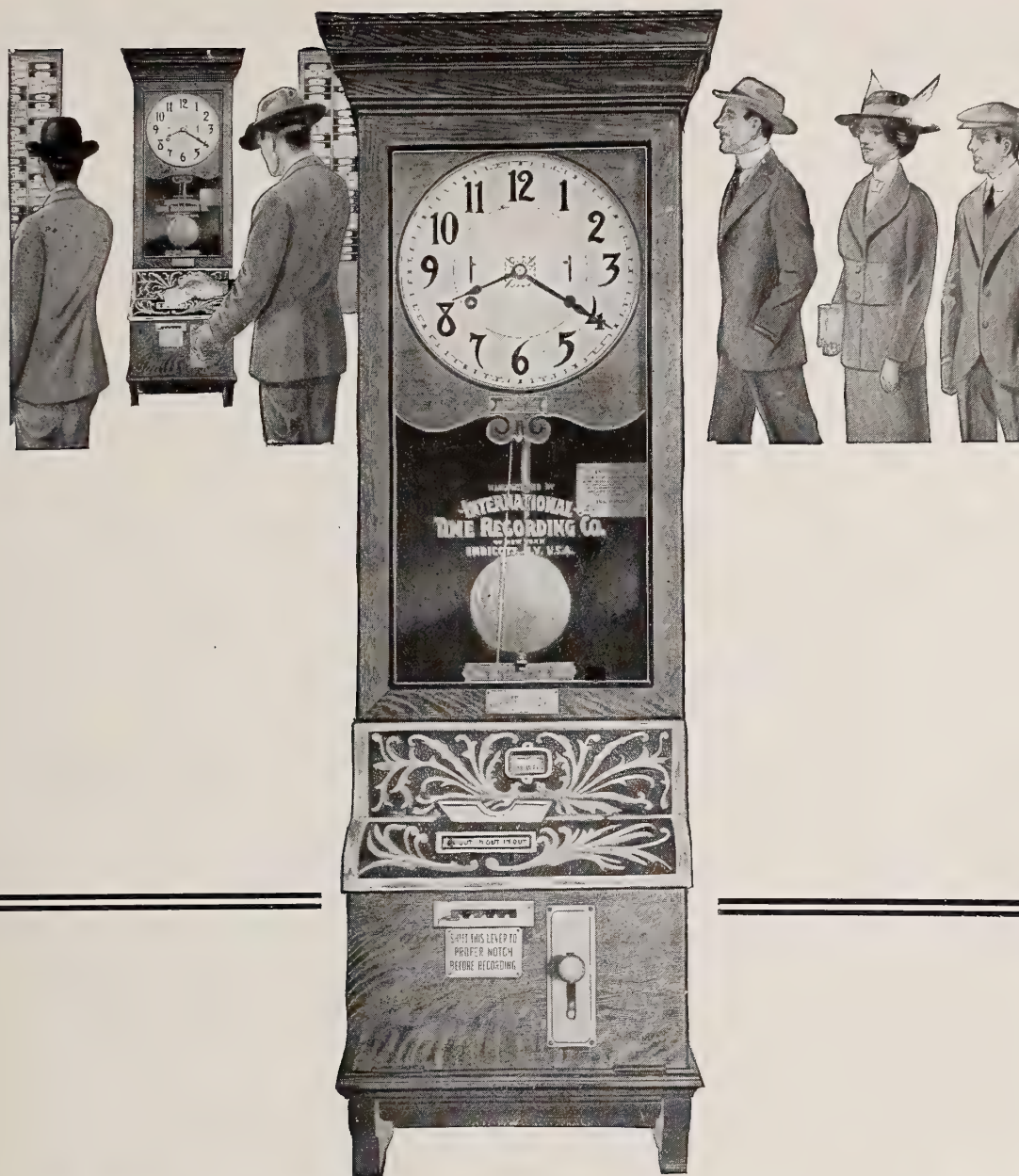
Cotton waste is used at so many machines and benches, also in erecting on the floor, that it is particularly difficult to care for it properly from a fire-prevention viewpoint.

The company in question solved all these difficulties by distributing the material twice a week at each individual machine or bench. At these times the old waste which was no longer fit for use was collected.

To each machine was attached a metallic pocket to hold the waste. At the benches similar pockets were attached to the brick wall at convenient points in front of the workmen; also, on the steel beams for the men erecting on the floor.

In this way there is a definite place for every piece of waste in the factory, and a definite assignment is made at fixed times to each waste receptacle. Fire insurance inspectors have heartily endorsed the method in this factory and the monthly consumption has fallen off to a considerable extent.

Incidentally, the different departments have a more tidy and orderly appearance than formerly. This metallic holder is a preventive from spontaneous combustion, which arises from cotton waste soaked with oil, and in most cases in industrial manufacturing plants, thrown in some place where they cannot get much air, they may be expected to take fire sooner or later. A little dampness makes it take fire quicker. The heat gets greater little by little, and the more porous the stuff the oil is on the greater the surface of oil exposed to the air if the amount of oil is not large enough to fill the pores completely. If there is any other inflammable material around probability of fire is increased.



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save you on your payroll.*

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 Offices : Ryrie Bldg.
 Cor. Shuter and Yonge Sts. **Limited, Toronto, Canada** **F. E. MUTTON,**
 Manager

TRADE OPPORTUNITIES IN RUSSIA.

(Continued from page 490.)

- Exhausters.
- Extinguishing apparatus, fire.
- Feed pumps.
- “ water meters.
- Fertilizers.
- Files.
- Fire-brick goods.
- Fire engines.
- Fittings—
 - Lead apparatus and fittings.
 - Boiler fittings.
 - Fittings for gas pipe heating plants.
 - Blast furnace accessories.
 - Cast steel fittings.
 - Water fittings.
- Friction couplings.
- Furnaces—
 - Heating and hardening.
 - Tempering.
- Furniture.
- Gas meters.
- “ producers.
- “ purifying plants.
- “ suction fans.
- Gauge glasses, water-gauge glasses.
- Glass and chinaware.
- Gloves.
- Governors—
 - Shaft governors.
 - Temperature regulators.
 - Revolution governors.
- Graphite.
- Guns, rifles, revolvers, etc.
- Haberdashery.
- Hammers, pneumatic.
- Hardware and tools.
- Hats.
- Hoists.
- Horse-power indicators.
- Hydro-extractors.
- Ink and drawing ink.
- “ ribbons for typewriters.
- Jewellery.
- Knitting machines.
- Lamps, arc.
- Lathes.
- Launches, motor.
- Laundry machinery.
- Lead, rolled.
- Leather and leather goods.
- “ belts.
- Lifts—
 - Press-button apparatus.
 - Hoisting machinery.
 - Blast-furnace lifts.
 - Paternoster works.
- Linen collars and shirts.
- Liquid meters.
- Locks locomobiles.
- Lubricating oils and greases.
- Machine tools for metals.
- “ “ toothed wheels.
- “ “ wood.
- Makers' name plates.
- Manometres.
- Material testing machines.
- Mining machinery.
- Motor cars.
- Motors, petrol.
- Musical instruments.
- Narrow-gauge railways of all kinds.
- Oil cooking stoves.
- Oil factories, machines for.
- Optical instruments.
- Packings, stuffing box.
- Paint brushes.
- Paints.
- Pelton water wheels.
- Pens.
- Photography, requisites for.
- Pipe lines—
 - Sheet metal tubes.
 - Fittings for pipe lines.
 - Coiled pipes.
- Ploughs, single-horse hillside reversible.
- Ploughs, steam.
- Presses.
- Pressure gauges.
- “ reducing valves.
- Printing machines.
- Pulley blocks.
- Pumps.
- Punching machines.
- Pyrometers.
- Rawhide gears.
- Ready-made clothing.
- Reamers.
- Refuse destructor furnaces.
- Riveting machines.
- Ropes.
- Rubber goods for household and hospital purposes.
- Rules.
- Saw-mill machinery.
- Saws.
- Scientific instruments.
- Separating machines.
- Separators, magnetic and electro-magnetic.
- Serges.
- Sewing machines.
- Sheaves, rope.
- Sheet lead.
- “ metal working machines.
- “ tin.
- Shoes.
- Slaughtering yard installations.
- Soap, medical and toilet.
- Speed indicators.
- Sporting requisites.
- Stationery.
- Steam traps.
- Steel wire.
- Stop valves.
- Street rollers.
- Surgical instruments.
- Tannery machines.
- Textiles.
- Textile machines.
- Thread-cutting machines.
- Toys.
- Turbine pumps.
- Turbines, steam.
- “ water.
- Typewriters.
- Umbrellas.
- Watches and clocks.
- Woolen and cotton underclothing.

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The Canadian Appraisal Company, having appraised over 1500 properties in Canada, is in a unique position to understand and meet your requirements.

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GALT : : ONTARIO

MR. SHERRARD IN THE WEST.

Mr. J. H. Sherrard, of the Alaska Feather & Down Co., Limited, Montreal, president of the Canadian Manufacturers Association, is making an extensive trip through Western Canada. During his visit to British Columbia he went to Prince Rupert on the invitation of the Board of Trade, and inspected the extensive harbor work now under way.

DEMAND FOR FUR SKINS IN AUSTRALIA.

Mr. D. H. Ross, Trade Commissioner at Melbourne, has informed the department that a call has been received from the representative of a firm in Australia who stated that his firm would be prepared to take the following quantities of Canadian furs per annum, if the prices were satisfactory:—

Prime red fox—From 2,000 to 10,000 undressed skins.

Musquash, first and second grade—Up to 5,000 undressed skins.

Skunk, first grade—Up to 5,000 undressed skins.

Beaver, good grade—Up to 4,000 undressed skins.

Otter, fair quality—Can take considerable quantities.

While the quantities as stated would seem to be very large, it is not possible at this distance to verify the particulars with regard to the matter, but the information as furnished would seem to indicate an important opening along these lines.

It is suggested that Canadians interested should also communicate with the Trade Commissioner at Melbourne when writing to the firm in question, the name of which may be obtained on application to the Department of Trade and Commerce, Ottawa. (Refer File No. 832).

Your Boiler Room

is where large profits can be made by installing a

Jones Underfeed Stoker

It is a **BIG** paying investment in the **SMALL** plant.

It is a **BIGGER** paying investment in the **LARGER** plant.

Fuel saving from 15% to 25% interests most steam plant owners.

Hundreds of **JONES STOKERS** are to-day making these savings in plants like your own.

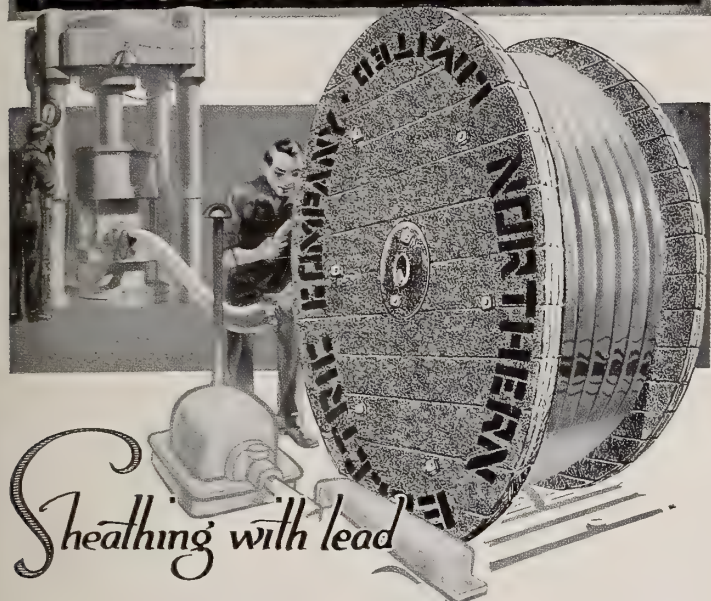
Have us report on the cost and merits of equipping your plant. The **JONES STOKER** is made in **Canada** but used everywhere. It is the simplest stoker built; fewer parts and none moving in contact with the fire; no grates; no losses through grate bars; no smoke.

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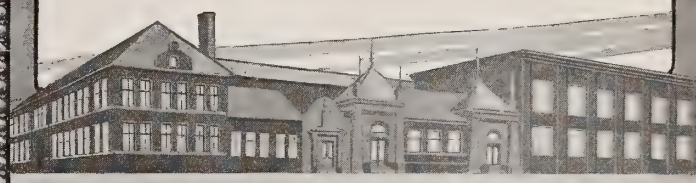
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Quote on paper as per sample attached and
specifications below. We use about
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All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID,

D. M. MEDCALF,

Minister of Public Works. Chief Inspector of Steam Boilers.

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DEATH OF MR. ROCKWELL.

We notice with regret the death of Mr. J. Clarence Rockwell, manager of the Lunenburg Foundry Company, Lunenburg, Nova Scotia. The deceased was born in Cornwallis, Nova Scotia, and was for some years connected with various foundries until he became secretary of the Windsor Foundry Company. He has acted as manager of the Lunenburg Foundry Company for sixteen years. The late Mr. Rockwell was well and favorably known among the business men of the Maritime Provinces.

FACILITIES FOR TRADE WITH RUSSIA.

The department is in receipt of correspondence from a highly responsible source which indicates the desire on the part of a steamship company with headquarters at Riga, Russia, to develop trade between Canada and Russia. The willingness is expressed to be of assistance to any Canadian firm desirous of arranging a selling agency in Russia for their products, it being understood that in the event of business resulting the steamship line in question would receive the preference for the carriage of the goods. This company intends taking what general steps may be considered necessary with a view to preparing the ground in order to take advantage later of the position brought about by the war. An effort will be made to open local agencies in the more important Russian towns, and also to increase the fleet of the company with a view to capturing from the Germans the Russian trans-Atlantic trade. Up to the present, with the exception of the direct line between Libau and New York, practically the entire Russian trade with North America has had to be transacted through the German ports of Hamburg and Bremen. The steamship line referred to, however, in their capacity as a local line subsidiary to the main trans-Atlantic routes, hope to be able to divert a considerable portion of this profitable business to ports other than German. It is stated that the carriage of every description of Canadian goods into Russia through one or other of the large European transshipment harbours such as London, Hull, Rotterdam, or Amsterdam, would come within their sphere of action. If business relationships could not be entered into for the present between Russian importers on the one hand and Canadian exporting houses on the other, it might nevertheless be possible to induce firms in London to act as intermediaries for the convenience of the Russian buyer in a manner similar to that whereby this business of intermediary has up to the present been carried on by the Germans. The name and address of the Russian steamship company above referred to may be obtained on application to the Department of Trade and Commerce, Ottawa. (Refer File No. A-1052.).



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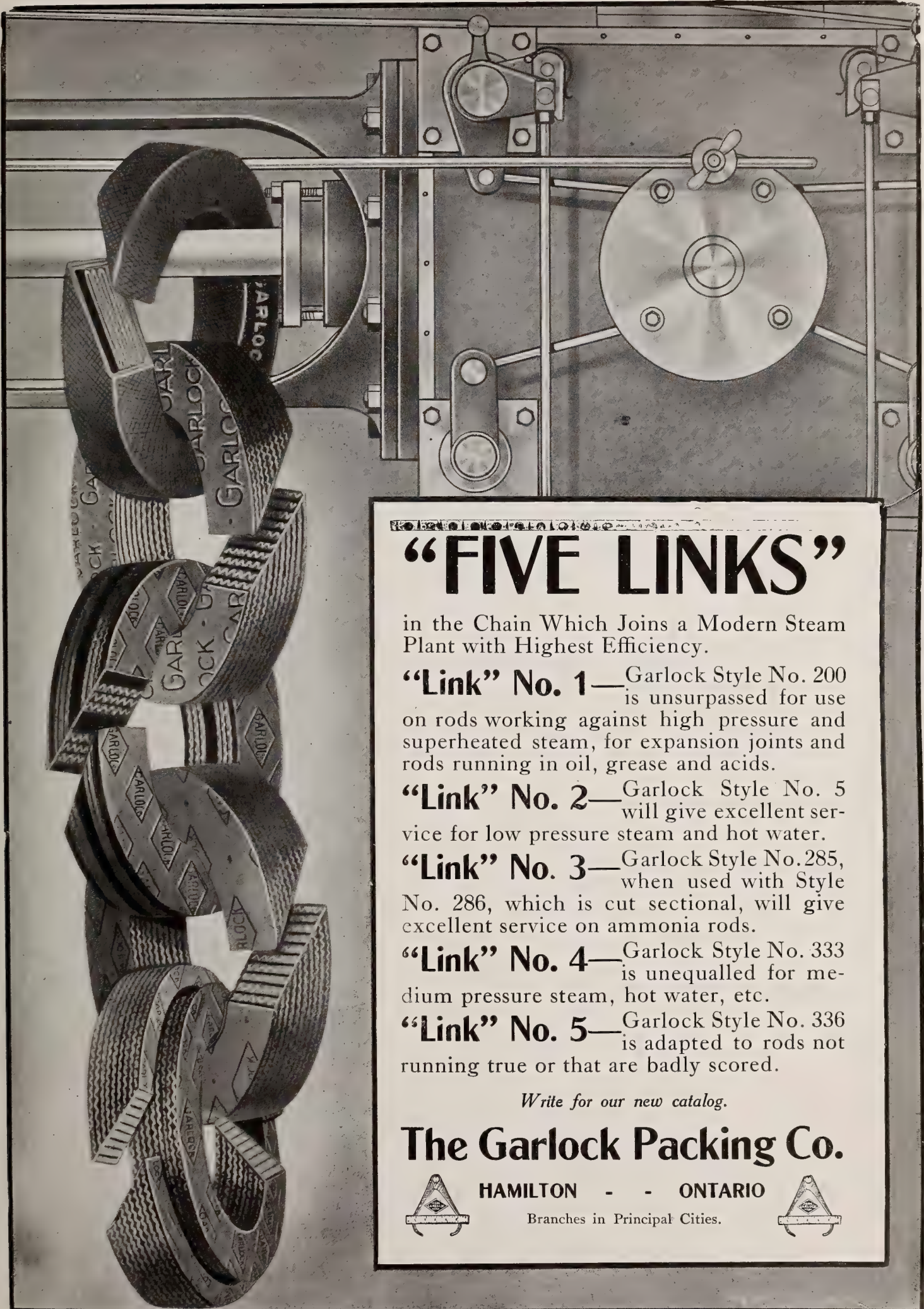
WALKERVILLE HDW. CO.
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Or direct from the manufacturers,

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“Link” No. 4—Garlock Style No. 333 is unequalled for medium pressure steam, hot water, etc.

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Extension of Canadian Trade

The Bank will make enquiries into the possibilities and requirements of markets abroad for exporters or importers who desire to extend their trade with British colonies or possessions. Owing to the large number of its correspondents and agents it has unusual facilities for this work.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . \$25,000,000
Capital Paid up . . . \$11,560,000
Reserve & Undivided Profits \$13,000,000
Total Assets . . . \$180,000,000

HEAD OFFICE, MONTREAL

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Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY—Corner William and Cedar Sts

Savings Department at All Branches

SPECIAL PRICES REPORT, 1914.

Department of Labor Issues Annual Volume on Subject.

The prevalence of war during a considerable part of the year 1914 lends a special interest to the report on prices just issued by the Department of Labor. The volume is the fifth annual report on the subject and known technically as "Whole-sale Price in Canada, 1914," though containing also much information as to retail prices. Prices during 1914 from week to week or from month to month are given for some 300 commodities representative of production and consumption in Canada, divided into the following groups:—Grains and fodders, animals and meats, dairy products, fish, fruit and vegetables, miscellaneous groceries, textiles, hides, leathers, boots and shoes, metals and implements, fuel and lighting, lumber, miscellaneous building materials, paints, oils and glass, house furnishings, drugs and chemicals, furs, liquors, tobaccos and sundries. The report includes also index numbers showing the price movement in each commodity and group back to 1890 and analyses of changes during the year with detailed information as to conditions affecting prices, production, demand, trade conditions, etc.

Findings of the Report.

The opening paragraphs of the report are as follows:—"The factor which chiefly affected Canadian prices during the year 1914 was the outbreak in August of the great European war. From January until April the general price-level was steady with a slight tendency upward; thereafter there was a decline of two points in the index number, during June and July, the latter being the lowest month of the year. The war, however, at once caused advances of about seven points, and though there was a reaction almost immediately, and although the year ended on approximately the same level as it began, the effect on the average for the twelve months was a rise. The Departmental index number (which includes 272 commodities) stood at 136.1 for 1914, compared with 135.5 for 1913, and 134.4 for 1912, these numbers being percentages of the average prices prevailing during the decade of 1890-99, the period adopted by the Department as the basis of comparison. The point reached in September, namely, 141.3, was the highest recorded by the number since 1890.

"The chief increases for the year as a whole appeared in the groups grains and fodder, which rose 14 per cent., animals and meats 6 per cent., woollens 8 per cent., hides 10 per cent., drugs and chemicals 7 per cent. Raw furs declined 33 per cent., fuel and lighting 6 per cent., and cottons 5 per cent. Food prices returned to the high levels that prevailed in the latter part of 1911 and early 1912. Meats were on a high level throughout the year, but showed much weakness in the last three months."

Retail Prices.

An appendix to the report gives the average retail prices of some thirty-two articles of food and of coal, wood and coal oil, and the rent of a representative workingman's dwelling in each of the localities of the Dominion having a population of 10,000 and over for each year back to 1910. A statement showing the average weekly expenditure of a typical family of five on these staple commodities gives the cost of a budget of food at \$7.73 as compared with \$7.33 in 1913 and 1912, \$7.13 in 1911, and \$6.95 in 1910. Meat, bread, flour and sugar averaged higher in 1914 than in 1913. Rent averaged \$4.65 per week as compared with \$4.75 in 1913, \$4.60 in 1912, and \$4.05 in 1911 and 1910.



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CANADIAN ROCKIES

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PANAMA PACIFIC EXPOSITION

If you are planning your 1915 trip to San Francisco, make sure your ticket reads via Canadian Pacific, otherwise you will miss the grandeur beauty of nature's most stupendous works—The Canadian Rockies.

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Are important tourist stop-over points on the Canadian Pacific Railway route to the Pacific Coast. These have excellent hotel accommodation, with opportunities for riding, climbing, swimming, boating and golf.

Agents will personally call on you to arrange your itinerary.

Particulars from any Canadian Pacific Ticket Agent, or write

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Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

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Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

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LIMITED

213 Board of Trade Building, Montreal

TRADE ENQUIRIES

The Weekly Bulletin of the Department of Trade and Commerce, from which some of these enquiries are taken, should be read regularly by those interested in foreign trade. It will be sent free on application to the Department at Ottawa.

137. **Canadian Patent of Cooking Utensil.**—A New York firm has the Canadian patent of a utensil for sale. We are able to furnish the name of the party to any manufacturer who might desire to take this matter up. ✓
138. **Hardware.**—A Newfoundland merchant firm is desirous of obtaining the names of Canadian hardware manufacturers who are willing to compete for the Newfoundland trade.
139. **Railway Rolling Stock.**—An English firm who have acted as representatives for a large German and Austrian firm for supply of railway material to India and English colonies is desirous of getting in touch with names of Canadian manufacturers who would be able to supply rolling stock, axles, wheels, etc., for these markets.
140. **Bolt-cutting Compound.**—A well recommended firm of Australian merchants who represent other Canadian manufacturers in non-competing lines is desirous of representing a firm producing bolt-cutting compound. This firm caters to a very high class of trade and is desirous of getting in touch with a firm producing a thoroughly dependable article.
141. **Cellular Underwear; Lisle Hose.**—A commission house dealing extensively in the Australian market desires to get in touch with Canadian manufacturers producing the above articles. They claim to be prepared to purchase from 1,000 to 5,000 dozens at a time.
142. **Steel Rods.**—We have been provided with a sample of a steel rod that is said to be largely required in England at present. Ingots, billets and bars are also in demand. The name of the enquirer will be provided on application.
143. **Woodenware.**—An agency firm representing in England a number of Canadian manufacturers of similar lines would like to hear from Canadian makers of coat hangers, paste rollers, broom handles and washboards.
144. **Sawmill and Woodworking Machinery.**—A Lancashire machinery manufacturing company whose own plant is fully employed, would be pleased to receive from Canadian manufacturers of sawmill and woodworking plant catalogues, prices, resale, discounts, delivery details and other particulars, which would place them in a position to quote for and obtain business which is offering.
145. **Wooden Thermometer Cases.**—We can provide firms interested in this line with the name of a British official who can put them in touch with the firm making the request.
146. **Varnish Cans.**—We can provide firms interested in this line with the name of a British official who can put them in touch with the firm making the request.

JULIUS COHEN & JOSEPHY

BRADFORD TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. Write for prices to

H. V. ANDREWS, ^{Canadian} Representative 32 Church Street, Toronto, Canada

Toronto Sales Office
205 Yonge Street

Acid Open Hearth Steel Castings
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Dominion Steel Foundry Company, Limited

Annual Capacity 15,000 Tons

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17-19 St. Therese Street - - - - MONTREAL

We carry large stocks of Kraft Rolls and Sheets, Brown and Colors—Can supply all grades of paper,
Bags and Twines at Lowest Prices.

Agents:—Mansfield Co.'s Watershed Waterproof Papers and Trotter's Scotch
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Joint and Veneer
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Always uniform.

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Special Woodworking
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Manufacturers of ACCOUNT BOOKS

**Loose Leaf Ledgers, Binders, etc.
Leather Goods, Diaries, Paper,
Stationery, Office Supplies**

**OFFICE AND FACTORY - - TORONTO
SIMCOE, PEARL AND ADELAIDE STS.**

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BRANTFORD : WINNIPEG : REGINA : CALGARY

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**TANKS
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TOWERS
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Sprinkler
Systems**

**TOWN WATER
SUPPLY
ETC., ETC**

**PUMPS
CONCRETE
MIXERS**

HOISTS, Etc.

Write, if interested



147. **Acetic Acid.**—A British house enquires for Canadian manufacturers turning out this product.
148. **Acetate of Lime.**—A British house enquires for Canadian manufacturers turning out this product.
149. **Formaldehyde.**—A British house enquires for Canadian manufacturers turning out this product.
150. **Barytes.**—A British house enquires for Canadian manufacturers turning out this product.
151. **Litharge.**—A British house enquires for Canadian manufacturers turning out this product.
152. **Saddle Webbing.**—A firm of British saddlery manufacturers wish to get in touch with Canadian manufacturers who can produce webbing used for the above purposes a small sample of which is in the possession of this office. We will be able to furnish a clipping from this sample to any manufacturers who may be interested. It is stated that the requirements are for 1,000 to 2,000 yards per week.
153. **Knitted Goods.**—We have full information connected with the wish of an English gentleman to represent Canadian manufacturers of all kinds of knitted goods. References are supplied and a full statement of the terms under which this gentleman is prepared to do business.
154. **Codfish.**—A French merchant is desirous of getting in touch with Canadian exporters.
155. **Asbestos.**—A French merchant is desirous of getting in touch with Canadian exporters.
156. **Maple Sugar.**—A French merchant is desirous of getting in touch with Canadian exporters.
157. **Salmon, Canned Fish, Sardines, etc.**—A French merchant is desirous of getting in touch with Canadian exporters.
158. **Vegetables and Preserved Food.**—A French merchant is desirous of getting in touch with Canadian exporters.
159. **Agricultural Implements, Motor Cars, Typewriting Machines.**—A French merchant is desirous of getting in touch with Canadian exporters.
160. **Boots and Shoes.**—A French merchant is desirous of getting in touch with Canadian exporters.
161. **Locomotives and Rails.**—A gentleman of long experience in Russian trade circles is desirous of representing Canadian firms manufacturing rails and locomotives. The particulars can be supplied on application to this office.
162. **Agency.**—A New York export house with an office in Buenos Aires is desirous of introducing Canadian goods into that market. We can furnish the name to any manufacturer who is interested.
163. **Agency.**—A gentleman furnishing numerous references and having twenty years' experience as salesman in Spanish-speaking countries, is desirous of representing a firm, or a number of firms, who wish to enter the South American trade.



Cut of 50-inch "Extra" Double Belt

Made by The J. C. McLaren Belting Co., Limited.

WE ARE HEADQUARTERS FOR
ALL KINDS OF

BELTING
LACE LEATHER
CARD CLOTHING
REEDS AND
GENERAL
MILL SUPPLIES

ABSOLUTE SATISFACTION GUARANTEED

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LEATHER BELTING

MADE IN CANADA

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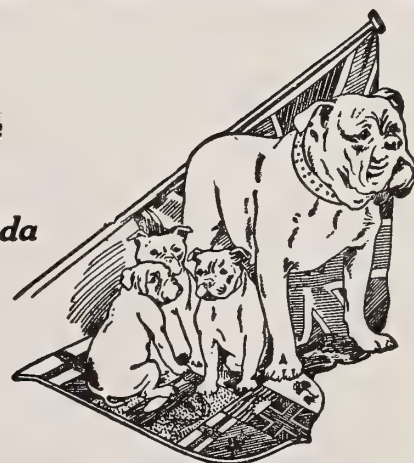
MANUFACTURERS OF

SUPERIOR QUALITY LEATHER
BELTING AND LACE LEATHER

Quality NOT PRICE
OUR AIM

**Canadian Manufacturers
SHOULD USE Canadian Belting**

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From
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Stock

"GENUINE OAK"
LEATHER BELTING

"D.K."
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Guaranteed to Give Satisfaction

D. K. McLAREN LIMITED

TORONTO MONTREAL ST. JOHN, N.B.
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If You Want Good Belting Get In Touch With Us

We are the sole manufacturers of
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"Maple Leaf"
Brand
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The best on the market for TRANSMISSION OF POWER. CONVEYING, etc.

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Offices Throughout the Civilized World

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THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying, and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices. CORRESPONDENCE INVITED.

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London, Ont.
Quebec, Que.
Vancouver, B.C.
Calgary, Alta.

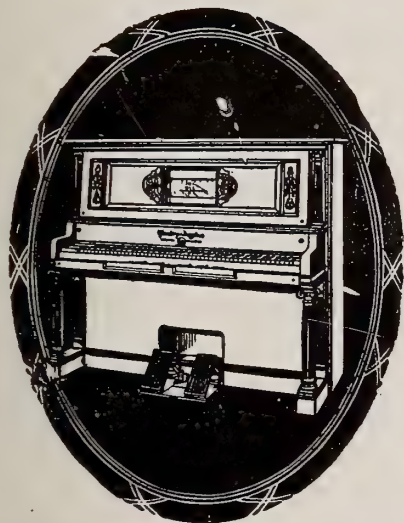
THOS. C. IRVING, Gen. Man. Western Canada, Toronto

164. **Agency.**—A local merchant house in Buenos Aires is desirous of representing Canadian manufacturers in that market. Full particulars are supplied and requested.
165. **Brass and Bronze Wire.**—A Connecticut firm desires to get the names of Canadian manufacturers of low brass and phosphor bronze wire. If any Canadian manufacturers are interested we shall be glad to supply the name and address.
166. **Yellow Cream Cheese.**—A New York export house desires to get in touch with Canadian manufacturers of the above commodity.
167. **Pipe and Flange Fittings.**—A South African firm claiming good connections with mining and other corporations is desirous of getting into communication with Canadian manufacturers who are able to supply ¼ inch to 12 inch elbows, bends, tees, flanges, etc., in wrought iron.
168. **Wall Paper.**—Manufacturers of wall paper are asked to communicate at once with a Newfoundland firm.
169. **Mica.**—A firm in Sweden desires quotations on mica. Prompt deliveries are required.
170. **Hollow-ware, Lamp Chimneys and Incandescent Glass.**—A Glasgow firm is open to purchase in large quantities enamelled and galvanized hollow-ware, lamp chimneys and incandescent glass.
171. **Glue and Asbestos.**—A Japanese importing and exporting firm wishes to get into communication with Canadian exporters and manufacturers of glue and asbestos.
172. **Steel.**—A Sheffield firm wishes to hear from manufacturers of billets. Full particulars including analysis and price delivered Sheffield should be sent.
173. **Birch Planks and Squares.**—A Glasgow firm is desirous of obtaining quotations for the following: Planks, 2 inches, 2½ inches, 3 inches and 4½ inches thick. Lengths, 10 feet to 16 feet long; breadth 9-inch average. Squares, 2 inches thick by 23 inches long (cut in the square); 2½ inches thick by 23 inches long or in multiple lengths. All free from rot and fairly clear of knots.
174. **Axles.**—A Cape Town firm asks for catalogues and quotations on cart and carriage axles.
175. **Kraft Paper.**—A large importing firm in Glasgow wishes to receive quotations and samples from Canadian mills.
176. **Birch Bars for Folding Bedsteads.**—A firm in the English Midlands manufacturing folding bedsteads for military purposes wishes to get into touch with Canadian firms able to supply birch bars such as are used for this purpose.
177. **Gas Tubes.**—A firm in Birmingham is in the market for gas tubes, and would like to hear from Canadian manufacturers.
178. **Agricultural Implements.**—A manufacturers' agent in Newfoundland desires to represent a Canadian manufacturer of farm machinery.

Men forget business cares in the enjoyment of

Gourlay-Angelus

Player-Pianos



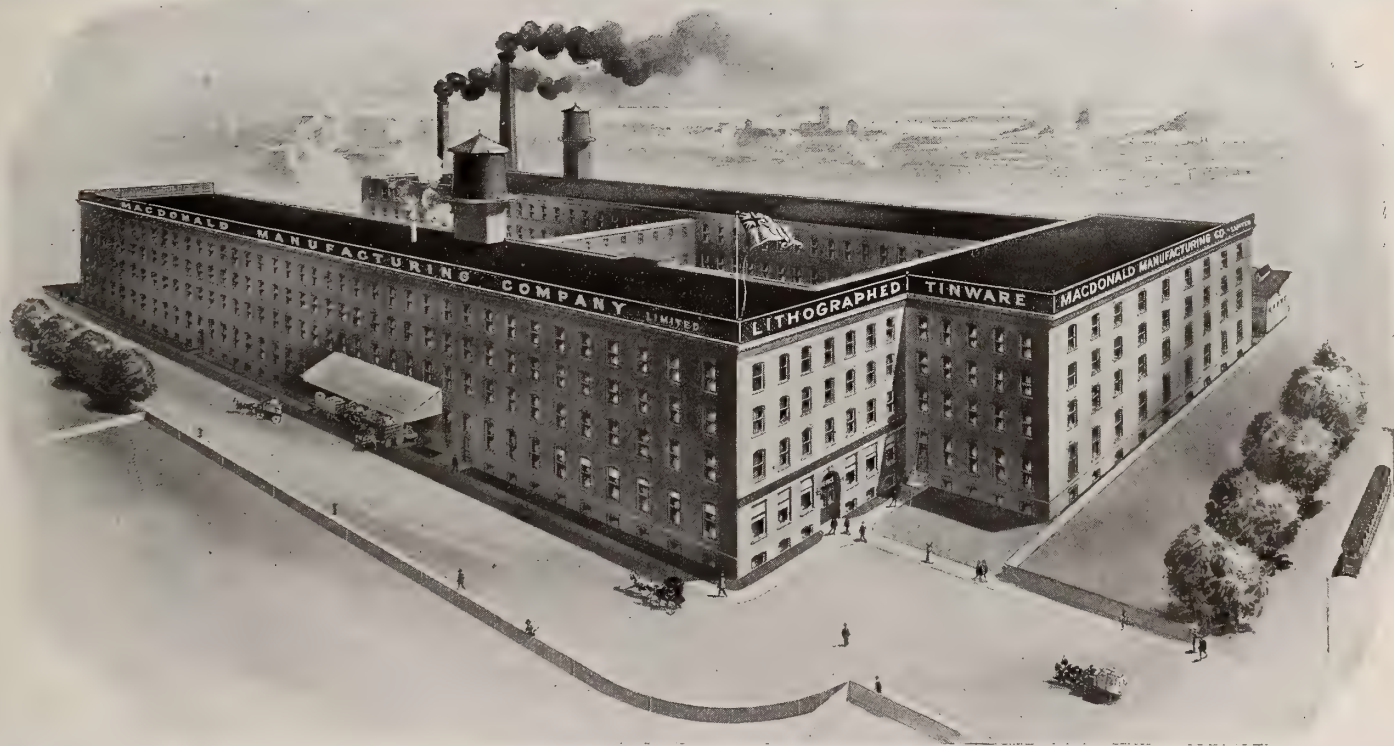
A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

In the opportunity for recreation thus afforded, many busy men find enjoyment hitherto undreamed of, as well as a complete rest from the business worries and cares of the day. If you find it hard to leave these cares behind you when you go home, depend upon it, a Gourlay-Angelus will make you forget them.

One Toronto manufacturer tells of this pleasure in a Gourlay-Angelus as follows:—"I have always been glad I purchased the Gourlay-Angelus. The longer I have it the more I enjoy it and the more I use it."

Write for Catalogue and Prices

GOURLAY, WINTER & LEEMING,
188 Yonge St., Toronto



MACDONALD MANUFACTURING CO., LIMITED, TORONTO

We Specialize on Cans or Boxes required for Customer's Exclusive Use
Practically Nothing Else made in our Entire Plant
This Ensures Undivided Attention to your Particular Order

PLAIN OR DECORATED TIN BOXES AND SIGNS



MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER

Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED

450 BARTON ST. EAST

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ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

NEW PROCESS GEARS RAWHIDE PINIONS

They last indefinitely too.

Ask us about it.

R. GARDNER & SON, LIMITED

Nazareth, Brennan and Dalhousie Streets
MONTREAL

179. **Woodenware; Church Pews.**—A firm of manufacturers' agents in Cape Town, with branch houses in all centres, requests samples, prices and particulars of agencies in the following lines: Cash drawers, coat hangers, hat and coat racks, yardsticks and trouser stretchers; church pews in oak with bent seats and circular backs.

180. **Trade with Russia.**—One of the largest houses in Moscow, which specializes in Siberian trade where they have ten branches, are in the market for the following, and would be pleased to hear from reliable Canadian firms: Bolts, and nuts; gas tubing, iron; wire nails; wire of all kinds, including barbed wire; portable engines; rock drilling machines; metal turning lathes; miners' shovels; chemicals, heavy; calcium carbide; acetate of lime; coal tar products, viz., pitch, carbolic acid, creosote, sulphate of ammonia, sulphate of soda; graphite; news and printing paper; wrapping and packing paper.

181. **Steel Bars.**—A correspondent in England desires the addresses of Canadian manufacturers who have representatives in Great Britain and who are in a position to supply bars for ferro-concrete purposes. These are ordinary mild steel bars of tensile strength of 28 to 32 tons per square inch.

ENGINEER'S POSITION WANTED.

Engineer engaged at present desires change. Can design and erect, conduct tests, test coal, analyze flue gases. Has given special attention to power plant wastes. Box 19, INDUSTRIAL CANADA.

MARKET FOR LUMBER IN GREAT BRITAIN.

Mr. J. T. Lithgow, Canadian Trade Commissioner, at Glasgow, sends an inquiry from a British firm for the following:—

Staves.—Quotations c.i.f. Liverpool for the following dimensions: 42-inch by $\frac{5}{8}$ -inch by $2\frac{1}{2}$ -inch to $4\frac{1}{2}$ -inch wide, average 3-inch. Spruce, balsam fir, Douglas fir acceptable.

Spruce, unplanned.—Quotations c.i.f. London in parcels: 2 ends each 17 by 14 by 9-16, in one or two pieces; 2 sides each $20\frac{1}{2}$ by 17 by 7-16, in one or two pieces; top and bottom, $20\frac{1}{2}$ by $14\frac{7}{8}$ by 7-16; 4 battens $13\frac{7}{8}$ by 2 by 9-16.

Buyers can take about 500,000 boxes over a year.

Spruce butter boxes.—Quotations c.i.f. Liverpool for the following dimensions: Sides, $13\frac{1}{8}$ -inch/ $12\frac{1}{8}$ -inch by 13-inch by 9-16 inch full thick; ends, 12-inch/11-inch by 13-inch by 9-16-inch full thick; bottom, $12\frac{1}{8}$ -inch by $12\frac{1}{8}$ -inch by 9-16-inch full thick; top, $13\frac{1}{8}$ -inch by $13\frac{1}{8}$ -inch by 9-16-inch full thick. 180,000 56-lb. department butter boxes.

All parts in two pieces each T. and G. Planed both sides to hold the thickness named after planing with a "break-joint" between sides and ends of not less than $3\frac{1}{4}$ -inch inclusive of T. and G. (That is to say that the distance between the joints of the sides and ends when the box is made up must not be less than $3\frac{1}{4}$ -inch).

The name of the above firm may be obtained on application to the Department of Trade and Commerce, Ottawa.

MORROW Products are Unconditionally Guaranteed

MORROW Products are Best by Actual Tests

Set Screws

Cap Screws

Cold Pressed Nuts

Twist Drills

*To be had from the largest and most responsible
Jobbing Houses from Coast to Coast*

John Morrow Screw & Nut Co., Limited
INGERSOLL - - - CANADA

MORROW DRILLS EXCEL IN EFFICIENCY

MORROW DRILLS ARE MADE IN CANADA

THE CONSOLIDATED MINING AND SMELTING CO. OF CANADA, LIMITED

BUSINESS OFFICE AND WORKS: TRAIL, BRITISH COLUMBIA

SMELTERS AND REFINERS
Purchasers of all Classes of Ores

Producers of
TRAIL BRAND PIG LEAD

Eastern Agents : Thomas Robertson & Co., Limited, Montreal

We Are Ready for War

Can supply every Canadian Manufacturer and Jobber with their entire requirements of Steel and Brass Compression GREASE CUPS, Plain, Ratchet or Leather Washer Types, any finish desired. Also all styles of Oil Hole Covers.

A NEW ONE



Hinge Lid Pressed Brass Oil Cup

With Syphon Feed, if desired. No order too large to ship from stock. Anything special you have been importing we will gladly make to your order. If your Jobber can't supply you with WINKLEY Cups write us for prices and Catalogue.

CANADIAN WINKLEY CO., LTD.
WINDSOR, ONTARIO

FELDSPAR IN ONTARIO.

By W. C. Hunter.

Canadian manufacturers! Why will you persist in supporting Prussian arms? Where are your interests centred, in Prussia or Canada? Are you aware that the following conditions exist, i.e., that Germany controls the production of potash in the markets of the world, that German capital is invested in this line in the principal countries of the world, and on our very borders. Now are you aware that we have, within the Province of Ontario, raw material of such nature and in such quantities, as to be able to not only meet German competition, but that we can produce potash at a less price than has heretofore been possible under the German methods of extraction. Are we not, as Emperor Wilhelm has said, entitled to a place in the sun, and with these great resources at our command, who can gainsay the statement that our niche is already hewn waiting for us to step into? It is not generally known that German potash exported to North America rarely exceeds 20% c.p. potash. Materials used in the reduction of potash from feldspar are obtainable in vast quantities in Ontario. This condition does not exist in Germany, but materials for reduction process have to be imported.

Are we, as Canadians, fair to ourselves or to posterity, when we overlook an opportunity for the development of our country's resources? Truly the old saying that "None are so blind as they who will not see" seems aptly to apply to we Canadians who permit our market to be throttled by a grabbing (nevertheless enterprising) German monopoly.

There are those who will say after having studied the potash-feldspar situation, that there is feldspar and—feldspar. This for the sake of argument we will grant them, but don't lose sight of the fact that there are millions of tons, yes hundreds of millions of tons of feldspar in Ontario, running

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

BRITISH COLUMBIA.

Dunvegan, B.C.

Six hundred men are at work grading from Spirit River to Grand Prairie City. These men are employed by Mr. Geo. H. Webster, who has a sub-contract for grading on the Grand Prairie Branch of the Edmonton, Dunvegan and British Columbia Railway.

NEW BRUNSWICK.

Chatham, N.B.

A factory 80 feet by 40 feet is being built by the Maritime Foundry Company, at a cost of \$40,000, for the manufacture of shells.

St. John, N.B.

The St. John Milling Company have just opened the first mill to grind Manitoba wheat in the Lower Provinces. The opening was attended by members of the Board of Trade and citizens. The mill starts with a fifty-barrel per day unit. This will be enlarged as business develops. The flour is having a large local sale.

The Provincial Government has awarded the contract for the substructure for the new bridge across the Petitcodiac River at Moncton, to Engineers & Contractors, Ltd., St. John. The contract price is \$197,000.

Extensions of water and sewerage systems are in progress in this city, also at Chatham, Bathurst and Sackville, indicating the general development that is taking place in the province. The erection of a hospital to cost \$13,000, has been begun at Newcastle. The money has been contributed by Miramichi people, and the structure will be composed of Miramichi sandstone.

ONTARIO.

Fort William, Ont.

A drying plant is being constructed for N. M. Patterson & Co., Limited, at an approximate cost of \$5,000.

The Ogilvie Milling Company are considering making an addition to their elevator, which will increase the capacity by 750,000 bushels.

as rich in c.p. potash 16%, and this is not as is the case in Norwegian spar, hidden away in inaccessible regions of the country, but in Ontario's case, lie within a network of four railways. There are those who will say after having read the above, "Wait until the war is over and we will do something." Yes, wait until the war is over and until Germany will have had an opportunity of again tying up the American manufacturer by contract for years to come. Now is the time when some movement should be made to win our place in the potash industry, so far as it applies to the North American continent at least. This is one of our birthrights, and we certainly owe it serious consideration, and I feel that after a thorough investigation by our sensible Canadian business methods, a thriving and permanent industry can be established that will add to our already recognized position as a world-producer.



By Royal Warrant

“Canadian Club” Whisky

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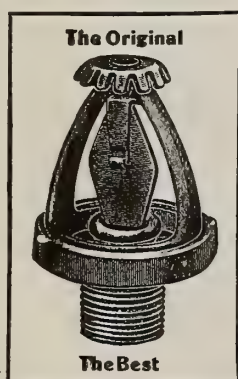
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SHEET METAL
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W. H. Banfield & Sons

120 Adelaide W. - Toronto



Gananoque, Ont.

An extension will probably be built to the plant of the Steel Company of Canada, Limited, at this place.

Hamilton, Ont.

The International Harvester Company again opened their malleable iron factory on July 19th, and will very shortly have the entire plant in operation. The activities are due to orders for agricultural implements for the West. The Oliver Plow Works will also be working to full capacity soon.

The T. Eaton Company are building a new factory on Hughson Street North, which, when completed, will employ 200 hands, and it is expected that that number will be increased. Mr. W. F. Eaton will have charge of the factory.

Kingston, Ont.

The building permits taken out during June covered work of an estimated value of \$39,470 as against \$16,797 for June of last year. The value of the work for which permits were taken out since the beginning of the year is estimated at \$118,494. For the same period last year it was \$176,072.

Niagara Falls, Ont.

A box factory is being built here by Pinnes & Sons.

Ottawa, Ont.

The Railway Department has placed orders for rolling stock aggregating \$1,250,000 for the Government railways. The Canadian locomotive works is to supply fifteen locomotives, while an order for 1,000 box cars is divided between the Canada Steel Car and Foundry Company, Montreal; the National Car Company, Hamilton, and the Eastern Car Company, Halifax. Delivery is to be ready by the crop-moving period.

The Department of Railways and Canals has reached an agreement with the Grand Trunk Pacific Railway for the leasing of the Lake Superior section of the National Transcontinental Railway, which runs from Graham, Ont., to Fort William.

Preston, Ont.

Plans are drawn for a three-storey building to be erected by the Hurlbut Shoe Company on Queen Street, near the present factory.

Peterborough, Ont.

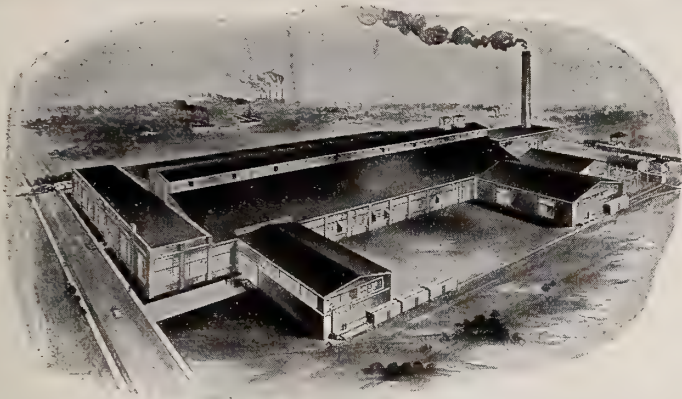
The brick plant of Curtis Bros. has been destroyed by fire.

Sarnia, Ont.

The Sarnia Gas and Electric Company will receive an offer of \$155,000 for its plant and equipment from the Sarnia City Council. This offer is the result of a report submitted by the Ontario Hydro-Electric Commission, and if it is accepted a hydro-electric by-law will probably be submitted to the ratepayers.

Welland, Ont.

M. Beatty & Sons, Limited, hereby announce that the control and management of the company has been changed from this date. Mr. H. L. Beatty has been elected President, and Mr. A. O. Beatty, Vice-President and General Manager. Mr. Harris T. Dunbar, of Buffalo, has been elected member of the Board of Directors. Messrs. V. R. Browning and B. F. Miles,



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FINISHED KEYS

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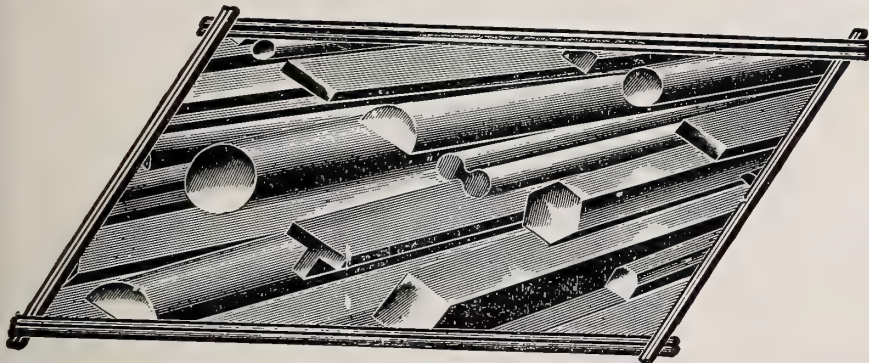
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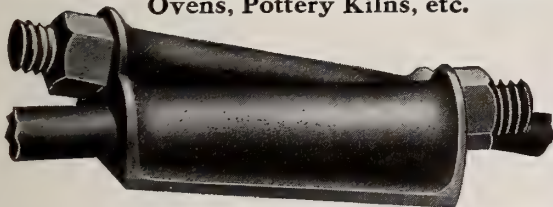
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For round Rods $\frac{3}{8}$ to $1\frac{1}{2}$ inch
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Music Cabinets.

Catalogue B.



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GODERICH, CANADA



Closet Seats,
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Medicine Cabinets,

Everything for the Bath Room.

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costs 50% to
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H. G. VOGEL CO. CANADA LIMITED

169 Duke St., MONTREAL, P.Q.

Directors, and R. A. Greene, General Manager, who have had charge of the business for the past three years, have severed their connection with the company.

Windsor, Ont.

Mr. Ralph T. Coe, manager of the Canadian Sirocco Co., Ltd., Windsor, since the organization of the Company, has resigned to enter the engineering service and sales field in New York State. Mr. Coe has been appointed District Manager for Warren, Webster & Co. and the American Blower Co., and will have offices at 519 Insurance Building, Rochester, and 19 Live Stock Exchange Building, Buffalo.

Mr. Clark T. Morse, formerly Montreal and Toronto District Manager for the Canadian Sirocco Co., Ltd., has been transferred to the Head Office at Windsor, Ont., to take charge of the engineering and sales work in place of Mr. R. T. Coe, resigned. Mr. A. M. Nichol continues in charge of Eastern Canadian sales, with headquarters in McGill Bldg., Montreal.

Ontario supplementary letters patent have been issued increasing the capital stock of the Swedish Crucible Company of Canada, Limited, from \$100,000 to \$200,000.

QUEBEC.

Montreal, Que.

A carriage factory is being built here by the A. Racine Company.

A plant for building flying machines will be built near Montreal by W. A. Dean, of Toronto.

IMPROVED POSTAL SERVICE FROM TORONTO TO WESTERN CANADA.

Recent changes have been made in the time of arrival and departure at Toronto, of C. P. R. mail trains to and from Western Canada in order to improve the mail service.

Mail matter intended for Manitoba, Saskatchewan, Alberta and British Columbia, should be in the General Post-office as much before the 5.40 p.m. closing as possible. Registered mail closes at 5.10. In some cases the change will result in the delivery of letters intended for the West eighteen hours earlier than by the old service. Correspondence from the West is now received in Toronto about 1 p.m. and is sent out to be delivered by the first trip of the carrier in the afternoon, thus admitting of the possibility of replies to correspondence being forwarded to Winnipeg and Western points on the same day it is received provided it reaches the General Post-office prior to 5.40 p.m.

WOOD-USING INDUSTRIES ON PRAIRIES.

An analysis of the wood-using industries of the Prairie Provinces has just been issued by the Forestry Branch of the Department of the Interior. It is one of a series dealing with wood-using industries prepared by the Department and will prove a most valuable addition to those already published, dealing with Ontario and the three Maritime Provinces. Similar bulletins will be published dealing with Quebec and British Columbia. The pamphlet is well illustrated and contains a large number of instructive tables dealing with prices, quality of material and the uses made of various woods in the factories of the Prairie Provinces. This report should be in the hands of every manufacturer who has anything to do with wood products.



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CONDUIT SYSTEM, it will
eliminate all risk of Fire.

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HAVE NO EQUALS

Conduits Company Limited
TORONTO MONTREAL

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCOUNTING FORMS

- Business Systems, Ltd., Toronto.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS

- *The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL

- The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- *Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE

- E. L. Drewry, Winnipeg, Man.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto.

ALUMINUM CASTINGS

- *Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS

- *The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS

- *T. Pringle & Sons, Montreal.

ASBESTOS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR

- Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES

- *Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
- *Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES,

- *Northern Electric Co., Limited, Montreal.
- *Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS

- *Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton

- Hamilton Cotton Co., Hamilton, Ont.

AWNINGS

- *Smart-Woods, Ltd., Montreal.

AXLES

- Canada Forge Co., Ltd., Welland, Ont.
- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Limited, Port Hope, Ont.
- *The Canada Metal Co., Toronto.
- *Tallman Brass & Metal Co., Hamilton.

BACON

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS

- *Scythes & Co., Ltd., Toronto.
- *Smart-Woods, Ltd., Montreal.

BAGS, Cotton

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, travelling

- *Scythes & Co., Ltd., Toronto.
- J. Eveleigh & Co., Ltd., Montreal, Que.

BAGS, travelling

- Lamontagne, Ltd., Montreal, Que.

BAKING JAPAN

- *Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:

- *Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS

- *The Geo. B. Meadows, Toronto
- Wire, Iron & Brass Works Co., Ltd., Toronto.
- *Canada Wire and Iron Works, Hamilton.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS AND CAGES:

- *Canada Wire and Iron Goods Co., Hamilton.
- *Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS

- *Tallman Brass & Metal Co., Hamilton.

BARB, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARB, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Brantford, Ont.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- The Canadian National Carbon Co., Ltd., Toronto.
- Canadian Carbon Company, Ltd., Toronto.

BEARINGS:

- *The Chapman Double Ball Bearing Co., Ltd., Toronto.
- The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze

- *Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding

- *Otterville Mfg. Co., Ltd., Otterville, Ont.
- *Smart-Woods, Ltd., Montreal.

BEEF

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BEEF

- E. L. Drewry, Winnipeg, Man.

BELTING, chains.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto.
- *J. L. Goodhue & Co., Danville, P.Q.

BELTING, rubber

- *Sadler & Howarth, Montreal.
- *The D. K. McLaren Belting Co., Ltd., Montreal.
- *The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, rubber

- *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES

- *Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS

- Samuel May & Co., Toronto.

BINDERS, loose leaf

- Business Systems, Ltd., Toronto.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:

- *A. C. Leslie & Co., Montreal.

BLANK BOOKS:

- Business Systems, Ltd., Toronto.
- *Morton, Phillips & Co., Montreal.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

BLASTING ACCESSORIES

- *Smart-Woods, Ltd., Montreal.
- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS:

- *The Canadian Sirocco Co., Windsor, Ont.

BOATS OF ALL KINDS

- *Sheldons, Ltd., Galt.
- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND AND OILS

- *Canadian H. W. Johns-Manville Co., Toronto.
- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.

- *M. Beatty & Sons, Ltd., Welland, Ont.

BOILERS, heating:

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

BOILERS, hot water or steam

- *Polson Iron Works, Ltd., Toronto
- *J. & R. Weir, Montreal, Que.
- Taylor-Forbes Co., Ltd., Guelph, Ont.

BOILERS, steam.

- *Jenckes Machine Co., Sherbrooke
- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

BOILER STANDS

- Anthes Foundry Ltd., Toronto.

BOLSTERS

- *Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:

- *The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.
- *The Steel Co. of Canada, Ltd., Hamilton.
- Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS

- R. G. McLean, Toronto.
- *The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS

- Stone Limited, Toronto.
- R. G. McLean, Toronto.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES.

- Ames-Holten-McCreedy, Ltd., Montreal, Que.
- J. Leckie Co., Ltd.
- The John Ritchie Co., Ltd., Quebec, Que.

BOWLING ALLEYS

- Samuel May & Co., Toronto.

BOXES, cellular board:

- *The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
- G. & J. Esplen, Montreal, Que.
- Barchard & Co., Ltd., Toronto.

BOXES, wooden

- The Moulton Mfg. Co., Ltd., Montreal.

BRAIDS AND TRIMMINGS

- The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS

- *Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS

- *Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS AND FINISHERS.

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto.
- *Tallman Brass & Metal Co., Hamilton.

BRASS GOODS

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto.

THE Garth Co., Montreal, Que.

- The James Morrison Brass Mfg. Co., Ltd., Toronto.

THE Kerr Engine Co., Ltd., Walkerville.

- *Tallman Brass & Metal Co., Hamilton.

BRASS PLATES

Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS

Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.

Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

*The Watrous Engine Works Co., Ltd., Brantford.

BRICK

National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer

National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway

Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.

*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters

Geo. Booth & Son, Toronto.

BROOMS

Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:

Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUILDING

Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed

Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:

*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

BUILDING PAPERS

*Bird & Son, Hamilton, Ont.

BUILDERS, ship

*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS

The Canadian Bag Co., Ltd., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:

*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and telephones:

*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, Transmission and Cable:

*Northern Electric Co., Limited, Montreal.

CABLES, wire

The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS, ADVERTISING NOVELTIES, etc.

Rolph & Clark, Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CAMERAS

Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS

Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOEES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin

A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty

A. R. Whittall, Montreal.

CANVAS

*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

CAPS, cloth

John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES

Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS

Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light

Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame

Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS

Canadian Carbonate Company, Limited, Montreal.

CARBIDE OF CALCIUM

Canada Carbide Co., Ltd., Montreal, Que.

CARDBOARD

Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Axminster and ingrain

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

CARRIERS, box and barrel

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

CARRIERS, brick

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

*Jeffrey Mfg. Co., Montreal, Que.

*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

CARS, industrial:

*Sheldons, Ltd., Galt.

CARTONS, lithographed

Harris Lithographing Co., Toronto.

CASTINGS:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:

*Tallman Brass & Metal Co., Hamilton.

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass and bronze:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.

*Dodge Mfg. Co., Toronto.

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Record Foundry and Machine Co., Moncton, N.B.

Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:

*Galt Malleable Iron Co., Ltd., Galt, Ont.

*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:

*Canadian Steel Foundries, Ltd., Montreal.

*Dominion Steel Foundry Co., Ltd., Hamilton, Ont.

Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

Grip, Ltd., Toronto.

R. G. McLean, Toronto.

CAUSTIC SODA

Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS

Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

*The Grasselli Chemical Co., Ltd., Toronto.

*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS

The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM

Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS

Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO

Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel

The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS

*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS

The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, TIME

*International Time Recording Co. of Canada, Ltd., Toronto.

CLOCKS, WATCHMEN'S

*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS

*Canadian H. W. Johns-Manville Co., Toronto.

*Goderich Organ Co., Goderich, Ont.

CLOTHING

John W. Peck & Co., Ltd., Montreal, Que.

MacKenzie & Co., Ottawa, Canada.

*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

CLUTCHES.

*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

Standard Fuel Co., Toronto.

COBALT OXIDE

The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS

Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE

S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers

O. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:

*Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD DRAWN SHAPES, flats, squares and hexagons:

*The Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

The Arlington Co., of Canada, Ltd., Toronto.

COLLARS

The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen

Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof

Williams, Greene & Rome, Berlin, Ont.

COLORES

Brandram-Henderson Ltd., Montreal, Que.

A. Ramsay & Son Co., Montreal, Que.

Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name

The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS

Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:

*Brown Bros., Ltd., Toronto.

*Morton, Phillips & Co., Montreal.

CONCENTRATORS:

*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.

The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING

*Conduits Company, Ltd., Toronto.

CONFECTIONERY

Ganong Bros., Ltd., St. Stephens, N.B.

Moirs, Limited, Halifax, N.S.

The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:

*Dodge Mfg. Co., Ltd., Toronto.

*Jenckes Machine Co., Sherbrooke.

COOLING APPARATUS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS

*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE

Canadian Seamless Wire Co., Ltd., Toronto.

CORKS

S. H. Ewing & Sons, Montreal, Que.

CORK CARPET

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:

*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS

Dominion Corset Co., Quebec, Que.

COTTONADES

Hamilton Cotton Co., Hamilton, Ont.

COUPLERS

*Canadian Steel Foundries, Ltd., Welland, Ont.

COUPLINGS:

*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS

Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS

De Laval Dairy Supply Co., Ltd., Montreal, Que.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:

*The Dominion Creosoting Co., Ltd., Vancouver, B.C.

CRUSHED STONE

The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:

*Jenckes Machine Co., Sherbrooke.

CUES

Samuel May & Co., Toronto.

CUPOLAS,

*Sheldons, Ltd., Galt.

CUPS, presentation

Standard Silver Co., Toronto.

CUPS, grease and oil

*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR

Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille

Hamilton Cotton Co., Hamilton, Ont.

CUTLERY

Standard Silver Co., Toronto.
Toronto Silver Plate Co., Ltd., Toronto.

DENIMS

Hamilton Cotton Co., Hamilton, Ont.

DERAILS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS

Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.

Grip, Ltd., Toronto.

DINING ROOM SUITES

The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES

*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS

Spramotor Co., London, Ont.

DOOR HANGERS

*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS

Daly & Morin, Montreal, Que.

DREDGES

*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt

Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS

J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES

London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:

*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric

Canadian Carbon Co., Ltd., Toronto.

DRY COLORS

P. D. Dods & Co., Ltd., Montreal, Que.

The Imperial Varnish & Color Co., Ltd., Toronto.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS

Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE

The Dominion Wire Rope Co., Ltd., Montreal.

DYNAMITE

Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating

*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN

Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

ELECTRICAL COMPOUNDS

Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.

*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE

Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES

Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING

Central Press Agency, Toronto

ELECTRICAL SUPPLIES,

*Canadian Westinghouse Co., Ltd., Hamilton.

*Jones & Moore Electric Co., Ltd., Toronto.

*Northern Electric Co., Limited, Montreal.

ELECTRO-SILVER PLATED WARE

Standard Silver Co., Toronto.

ELEVATORS:

*Jenckes Machine Co., Sherbrooke

Turnbull Elevator Mfg. Co., Toronto.

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS

Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS

*The Geo. B. Meadows, Toronto

Iron and Brass Goods Works Co., Ltd., Toronto.

*Canada Wire and Iron Works, Hamilton.

ELEVATORS, hydraulic and electric

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

EMERY DRESSERS and STANDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS

R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE

McClary Mfg. Co., London, Ont.

ENGINES

*The Canadian Sirocco Co., Windsor, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

J. & R. Weir, Montreal, Que.

*Polson Iron Works, Ltd., Toronto.

*Sheldons, Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasoline

Gould-Shapley-Muir Co., Ltd., Brantford, Ont.

*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline tractor

plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting

*M. Beatty & Sons, Welland.

*Watrous Engine Works Co., Ltd., Brantford.

ENGINES, steam plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

Rolph & Clark, Ltd., Toronto.

Stone, Limited, Toronto.

ENGRAVERS, half-tone

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate

American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote

American Bank Note Co., Ottawa, Ont.

ENGRAVING:

*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate

Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS

J. Fleury's Sons, Aurora, Ont.

ENVELOPES

Barber-Ellis Co., Ltd., Toronto.

Canada Envelope Co., Montreal, Que.

ENVELOPES, Transos, Business Systems, Ltd., Toronto.

EXCELSIOR PADS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXCELSIOR

*Delaney and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS

*Delaney and Pettit, Ltd., Toronto, Ont.

EXPERTS IN PATENT CAUSES

Ridout & Maybee, Toronto.

EXPLOSIVES, high

Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS

Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery

De Laval Dairy Supply Co., Ltd., Montreal, Que.

J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:

*The Canadian Sirocco Co., Windsor, Ont.

*Sheldons, Ltd., Galt.

FASTENERS, belt

*Sadler & Haworth, Montreal, Que.

FENCES and GATES:

*Dennis Wire & Iron Works Co., London.

*Canada Wire and Iron Works, Hamilton.

FENCING AND GATES, woven wire

Banwell Hoxie Wire Fence Co., Hamilton, Ont.

*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire

The Great West Wire Fence Co., Ltd., Winnipeg, Man.

C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAIRS:

*The E. B. Eddy Co., Ltd., Hull.

FILES

Henry Disston & Sons, Ltd., Toronto.

*The Nicholson File Co., Port Hope, Ont.

FIRE ALARMS,

*Northern Electric Co., Limited, Montreal.

FIRE DOOR HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:

*Watrous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:

*Canada Wire and Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS

*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.

*Canadian H. W. Johns-Manville Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS

*Watrous Engine Works Co., Ltd., Brantford.

FIRE HOSE

*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.

Dunlop Tire and Rubber Goods Co., Limited, Toronto.

*Gutta Percha & Rubber, Ltd.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*Eureka Mineral Wool & Asbestos Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS

*Pedlar People Ltd., Oshawa, Ont.

FIRE SPRINKLER SYSTEMS.

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- *The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.

- *Chicago Bridge & Iron Works, Bridgeburg, Ont.
- The Garth Co., Montreal, Que.

FISH, Atlantic Sea-Foods

- Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE

- Anthes Foundry, Ltd., Toronto.

FITTINGS, steam

- Warden King, Ltd., Montreal, Que.

FLAGS

- *Scythes & Co., Ltd., Toronto.
- *Smart-Woods, Ltd., Montreal.

FLASHLIGHTS

- Canadian Carbon Co., Toronto.

FLOORING, hardwood

- Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS

- Standard Clay Products, Ltd., St. Johns, Que.

FORGES:

- *Sheldons, Ltd., Galt.

FORGINGS

- Canada Forge Co., Ltd., Welland, Ont.
- *The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP

- *Dominion Stamping Co., Walkerville, Ont.

FOUNTAIN FRUITS and Juices

- J. J. McLaughlin, Ltd., Toronto.

FRICTION CLUTCH PULLEYS:

- *Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS,

- manganese
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL

- Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's

- Holt, Renfrew, Ltd., Quebec.

FUR GOODS

- John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons

- J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES

- Gurney Foundry Co., Ltd., Toronto.
- McClary Mfg. Co., London, Ont.
- The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air

- Bedford Stove Co., Bedford, Que.

FURNITURE, hall

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office

- Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office

- The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan

- Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:

- *A. C. Leslie & Co., Montreal.

GALVANIZERS

- Acme Stamping & Tool Works Ltd., Hamilton, Ont.
- *Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES

- *Ontario Wind & Pump Co., Ltd., Toronto.
- De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES

- *The Waterous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial"

- Marine
Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS,

- special underground
S. F. Bowser & Co., Toronto.

GASOLINE

- *The Imperial Oil Co., Ltd., Toronto.

GEARS, CUT

- Hamilton Gear & Machine, Toronto.

GENERATORS:

- *Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
- *Canadian Westinghouse Co., Ltd., Hamilton.

GINS

- The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE

- Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut

- Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS

- Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS

- Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror

- Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS

- A. R. Clarke & Co., Ltd., Toronto.
- Craig, Cowan Co., Limited, Toronto.

GLUE

- Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE

- Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS

- Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)

- J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE

- J. J. McLaughlin, Ltd., Toronto.

GRATES.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS

- Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal

- *Canada Wire & Iron Goods Co., Hamilton.
- *Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.
- *The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES

- *Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES

- The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS

- B. J. Coghlin Co., Ltd., Montreal.

GYPSPUM, crushed

- *Albert Mfg. Co., Hillsborough, N.B.

GYPSPUM PRODUCTS

- *Manitoba Gypsum Co., Ltd., Winnipeg, Man.

De Laval Dairy Supply Co., Ltd., Peterboro, Ont.**HALL FURNITURE**

- The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS

- F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE

- *Richards Wilcox Canadian Co., Ltd., London, Ont.
- Taylor-Forbes Co., Ltd., Guelph, Ont.
- The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING

- Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH

- Wilson Bros., Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS

- Wilson Bros., Ltd., Collingwood, Ont.

HARNESSES

- Lamontagne Ltd., Montreal, Que.

HATS, men's straw

- The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw

- The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver

- The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw

- Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope

- The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS

- *The Canadian Sirocco Co., Windsor, Ont.

- *Waterous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:

- *The Goldie & McCulloch Co., Ltd., Galt.

HEATING APPLIANCES:

- *Sheldons, Ltd., Galt.

HEATING SYSTEMS

- Gurney Foundry Co., Ltd., Toronto.

HESSIANS

- The Canadian Bag Co., Ltd., Montreal, Que.

- *Scythes & Co., Ltd., Toronto.

- *Smart-Woods, Ltd., Montreal.

HINGES:

- *The Steel Co. of Canada, Ltd., Hamilton.

HOISTS

- *M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.

- *M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.

- *M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial

- Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber, Limited.

HUMIDIFIERS

- *The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES

- Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS

- Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY

- The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INCUBATORS & BROODERS

- Lee Mfg. Co., Ltd., Pembroke, Ont.

INDEX CARDS

- Business Systems, Ltd., Toronto.

INJECTORS, automatic and autopoitive

- Penberthy Injector Co., Ltd., Windsor, Ont.

INSULATION, patent seamless cork

- *Canadian H. W. Johns-Manville Co., Toronto.

- The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER

- *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS

- Standard Clay Products, Ltd., St. Johns, Que.

IRON:

- *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar

- Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:

- *Canada Wire & Iron Goods Co., Hamilton.

- *Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural

- *Canada Wire & Iron Goods Co., Hamilton.

- The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental

- *Canada Wire & Iron Goods Co., Hamilton.

- The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY

- A. R. Whittall, Montreal.

JAM, canned goods, etc.

- E. D. Smith & Son, Limited.

JAPANS, enamels, etc.

- A. Muirhead Co., Ltd., Toronto.

JOINTERS:

- *Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER

- S. H. Ewing & Sons, Montreal, Que.

JEWELRY, enamelled souvenir

- Caron Bros., Montreal, Que.

JEWELRY, gold filled

- Caron Bros., Montreal, Que.

JOIST HANGERS

- *Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR

- The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:

- *Sheldons, Ltd., Galt.

KINDLING

- Standard Fuel Co., Toronto.

KNIFE GRINDERS:

- *W. H. Banfield & Sons, Toronto.

KNITTED GOODS:

- *Penman's, Ltd., Paris, Ont.

KNIVES

- Henry Disston and Sons, Toronto, Ont.

- The Peter Hay Knife Co., Ltd., Galt, Ont.

- Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper

- Henry Disston and Sons, Toronto, Ont.

- The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

- Canadian Kodak Co., Ltd., Toronto.

LABELS

- Lawson & Jones

LARD

F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS

Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:

Canadian Billings & Spencer Ltd., Welland.

LAUNCHES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS

Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled

Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS

Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD

*The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS

Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET

Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE

*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER

The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'

Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy

Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS

Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole

The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather

A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.

Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.

Clarke & Clarke, Limited, Toronto.

LEATHER, upper

A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.

*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

LINOLEUM

Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED BUSINESS STATIONERY

Business Systems, Ltd., Toronto.

LITHOGRAPHED TIN WARE:

*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS

American Bank Note Company, Ottawa, Ont.
Harris Lithographing Co., Toronto.
*Montreal Lithographing Co., Montreal.
Stone, Limited Toronto.
Rolph & Clark Ltd., Toronto.

LOCKERS:

*Canada Wire & Iron Works Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS

Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial

*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS

The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF, BINDERS AND FORMS

Business Systems, Ltd., Toronto.

LOOSE LEAF SYSTEMS

Copeland-Chatterson Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES

The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed

Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks

*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.

Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, red pine and spruce

Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar

Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, white pine

Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:

*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, elevating.

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Jeffrey Mfg. Co., Montreal.

MACHINERY, flour mill:

*The Goldie & McCulloch Co., Ltd., Galt.

MACHINERY, grinding

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY, hoisting, etc.

*The Jeffrey Mfg. Co., Montreal.
*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.
*M. Beatty & Sons, Ltd., Welland, Ont.

MACHINERY, ice cream

J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill

*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping

*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking

Sawyer-Massey Co., Ltd., Hamilton, Ont.

*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill

The E. Long Mfg. Co., Ltd., Orillia, Ont.

P. Payette & Co., Penetanguishene, Ont.

W. P. Plant, Hastings, Ont.

*Waterous Engine Works Co., Ltd., Brantford.

MACHINERY, special

Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery

W. P. Plant, Hastings, Ont.

MACHINERY, transmission

*Dodge Mfg. Co., Ltd., Toronto.
*Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, wood working

*Berlin Machine Works, Ltd., Hamilton.
*The Waterous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:

*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting

Spramotor Co., London, Ont.

MAGNESITE

Canadian Carbonate Co., Ltd., Montreal, Que.

MAILING TUBES:

*Dominion Paper Box Co., Ltd., Toronto.

MALT:

*Hiram Walker & Sons, Ltd., Walkerville.

MAPS AND MAP MOUNTING

The Geo. M. Hendry Co., Ltd., Toronto.
Stone, Limited, Toronto.

MARTINGALE RINGS AND SLIDE

LOOPS
The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:

*Berlin Machine Works, Ltd., Hamilton.

MATCHES:

*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned

The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT

*Canadian Sirocco Co., Windsor, Ont.

MECHANICAL STOKERS,

*The Jones Underfeed Stoker Co., Ltd., Toronto.

MEDICINES, patented and pharmaceutical

Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt

*Canada Metal Co., Toronto.

*Tallman Brass & Metal Co., Hamilton.

Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:

*Metallic Roofing Co., Ltd., Toronto.

*Metal Shingle & Siding Co., Ltd., Preston.

*Pedlar People, Ltd., Oshawa, Ont.

METAL ROOFING

*Pedlar People Ltd., Oshawa, Ont.

METAL, spinning and stamping

The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SHINGLES:

*Metal Shingle & Siding Co., Ltd., Preston.

*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.

METAL SIDING:

*Metallic Roofing Co., Ltd., Toronto.

*Metal Shingle & Siding Co., Ltd., Preston.

*Pedlar People, Ltd., Oshawa, Ont.

MILK BOTTLE CAPS

Business Systems, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTEES

Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)

Holt, Renfrew Ltd., Quebec, Que.

A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)

Holt, Renfrew, Ltd., Quebec, Que.

MORTISERS:

*Berlin Machine Works, Ltd., Hamilton.

MOTOR CAR PARTS AND ACCESSORIES

*Russell Motor Car Co., Ltd., Toronto.

MOTOES:

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

MOTORS, D.C.

*Canadian Crocker Wheeler Co., St. Catharines, Ont.

MOTORS, electric (alternating current)

*Canadian Westinghouse Co., Ltd., Hamilton.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)

*Canadian Westinghouse Co., Ltd., Hamilton.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)

Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:

*The Gramm Motor Truck Co., Ltd., Walkerville.

MOULDERS:

*Berlin Machine Works, Ltd., Hamilton.

NAILS:

*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper

Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire

Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

The Graham Nail Works, Toronto.

NAME PLATES

Patterson and Heward, Toronto.

NAPHTHA

*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE

Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NUTS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

*The National Acme Mfg. Co., Montreal.

OAKUM, plumbers', Canadian Navy Factory Waste and Metal Co., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

OAT CRUSHERS AND FLAKERS

J. Fleury's Sons, Aurora, Ont.

OFFICE STATIONERY:

*The Montreal Lithographing Co., Ltd., Montreal.

OILS

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES

Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring

S. F. Bowser & Co., Toronto.

OIL COMPANIES

Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)

*British American Oil Co., Ltd., Toronto.

OILS, Petroleum

*The Imperial Oil Co., Ltd., Toronto.

OILCLOTHS, floor and table

Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

ORGANS

*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe

Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour

Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OVENS, portable bake

Bedford Stove Co., Bedford, Que.

OVERALLS

Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS

Rosamond Woollen Co., Aumont, Ont.

OVERHEAD RUNWAYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine:

*Garlock Packing Co., Hamilton.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS

R. C. Jamieson & Co., Ltd., Montreal, Que

PAINTS and VARNISHES:

A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.

Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

*Ault & Wiborg Co. of Canada, Toronto.

*The Dougall Varnish Co., Ltd., Montreal.

Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge

Standard Paint and Varnish Co. Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative

Standard Paint Co. of Canada, Ltd., Montreal, Que.

PAPER BOARDS

Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book

Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES

King Paper Box Co., Ltd., Montreal, Que.

PAPERS, bond

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, envelope

Provincial Paper Mills Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, KRAFT, wrapping printing and waterproof

*Beveridge Paper Co., Ltd., Montreal, Que.

PAPER, news

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building

Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordon Pulp and Paper Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, coated, book and label

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes

Gummed Papers, Ltd., Brampton, Ont.

PAPER, label

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger

*Rolland Paper Co., Ltd., Montreal, Que.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall

Stauntons, Ltd., Toronto.

PAPER, writing

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, writing, high-grade

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:

*Dominion Paper Box Co., Toronto.

PARK SEATS

Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES

The Geo. McLagan Furniture Co. Limited, Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION

Ridout and Maybee, Toronto.

PAY ROLL AUDITS

*International Time Recording Co. of Canada, Ltd., Toronto.

PEAS AND BEANS FOR SEED

W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:

*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS

Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS

Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.

*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANOS, player

*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANO STOOLS and BENCHES

*Goderich Organ Co., Goderich, Ont.

PICKLES:

The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS:

T. A. Lytle Co., Ltd., Toronto.

PIG IRON:

*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS ETC.

Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges.

Caron Bros., Montreal, Quebec.

PIPE, cast iron, for water and gas.

National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:

*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:

*Eureka Mineral Wood & Asbestos Co., Toronto.

PIPES, culvert

Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized

*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer.

Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings

Warden King Ltd., Montreal, Que.

PIPE AND TUBES, wrought merchant

*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off Machines

John H. Hall & Sons, Limited, Brantford, Ont.

PISTON RODS

*The Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:

*Berlin Machine Works, Ltd., Hamilton.

PLANING MILLS

G. & J. Esplen, Montreal, Que.

PLASTER OF PARIS

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land

*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:

*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS

J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:

Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES

Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain

Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar

Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence

Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS

Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES

Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES AND DIES

Brown Boggs Co., Ltd., Hamilton, Ont.

PRESSES, baling

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic

William R. Perrin & Co., Ltd., Toronto.

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer

William R. Perrin & Co., Ltd., Toronto.

PRINTED BUSINESS STATIONERY

Business Systems, Ltd., Toronto.

PRINTERS

Rous & Mann, Ltd., Toronto.

R. G. McLean, Toronto.

PRINTERS, catalogue:

R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING

Lawson & Jones, Ltd., London, Ont.

PRODUCE

The Wm. Davies Co., Ltd., Toronto.

PROVISIONS

The Wm. Davies Co., Ltd., Toronto.

PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*Jeffrey Mfg. Co., Montreal, Que.

PULP, Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
Spiramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

RAILWAY TARIFF BINDERS
The Esdale Press Ltd., Edmonton.

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

BEED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURS, iron, copper and brass
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.

ROOFINGS
*Bird & Son, Hamilton, Ont.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.
The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto

RULES
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.

RYE
The St. Hyacinthe Distillery Co. Ltd., St. Hyacinthe, Que.

SADDLERY HARDWARE
*Dominion Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor, Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut and oand
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING, asbestos corrugated:
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron, galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Canadian H. W. Johns-Manville Co., Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island, Que.
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
A. R. Clarke & Co., Ltd., Toronto.

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont.

SHOES, running and athletic
Ames-Holden-McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal, Que.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

SILVERWARE
Toronto Silver Plate Co., Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto.

SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.
*Pedlar People Ltd., Oshawa, Ont.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.

SMOKE CONSUMERS.
*The Jones Underfeed Stoker Co., Ltd., Toronto.

SOAPS
J. Barsalou & Co., Ltd., Montreal, Que.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.

SOLDER, silver
Geo. H. Lees & Co., Hamilton.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.

SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SPLIT PEAS
H. Murton, Guelph, Ont.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.

SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.

SPRAYERS
Spiramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

- STAINS**
R. C. Jamieson & Co., Ltd., Montreal, Que.
- STAINS, creosote shingle**
A. Muirhead Co., Ltd., Toronto.
- STAMPINGS**
*Dominion Stamping Co., Ltd., Walkerville, Ont.
- STAMPS, steel, brass and rubber**
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
- STAMP MILLS:**
*Jenckes Machine Co., Sherbrooke.
- STATIONERY, office**
Harris Lithographing Co., Toronto.
- STEAM PIPE and BOILER COVERINGS, asbestos:**
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
- STEAM SHOVELS**
*M. Beatty & Sons, Ltd., Welland, Ont.
- STEAM SPECIALTIES:**
*Sheldons, Ltd., Galt.
- STEAM TRAPS**
*Canadian Sirocco Co., Windsor, Ont.
*Canadian Morehead Manufacturing Co., Limited, Woodstock.
- STEEL:**
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- STEEL BUILDINGS**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
*Pedlar People, Ltd., Oshawa, Ont.
- STEEL CASTINGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Steel Foundry Co., Ltd., Hamilton.
- STEEL PEN STOCKS:**
*Jenckes Machine Co., Sherbrooke.
- STEEL RODS:**
*The Steel Co. of Canada, Ltd., Hamilton.
- STEEL SASH:**
*Dennis Wire & Iron Works, Co., London.
*Henry Hope & Sons, Ltd., Toronto.
- STEEL SHELVING:**
*Dennis Wire & Iron Works, Co., London.
- TELEPHONE ACCESSORIES,**
*Northern Electric Co., Limited, Montreal.
- STENCILS, brass**
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
- STEREOTYPING**
Central Press Agency, Toronto.
- STOKERS,**
*The Jones Underfeed Stoker Co., Ltd., Toronto.
- STOOLS AND BENCHES, piano and organ**
*Otterville Mfg. Co., Ltd., Otterville, Ont.
- STONE**
The Corinthian Stone Co., Guelph, Ont.
The Hagersville Contracting Co., Hagersville, Ont.
- STORE FITTINGS**
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
- STOVES**
Tudhope-Anderson Co., Ltd., Orillia, Ont.
Bedford Stove Co., Bedford, Que.
- STOVE BOARDS**
Sheet Metal Products Co. of Canada, Ltd., Toronto.
- STOVE LININGS**
Standard Clay Products, Ltd., St Johns, Que.
- STOVES AND RANGES**
Bedford Stove Co., Bedford, Que.
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.
- STRETCHERS, lace curtain**
*Otterville Mfg. Co., Ltd., Otter-
- STRUCTURAL STEEL**
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.
- SUIT CASES**
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
- SURFACERS:**
*Berlin Machine Works, Ltd., Hamilton.
- SWITCHBOARDS**
*The Canadian Independent Telephone Co., Ltd., Toronto.
- SWITCHES, railway**
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
- SWITCHES AND FROGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
- SWITCH STANDS**
*Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.
- TABLES, billiard**
Samuel May & Co., Toronto.
- TABLE COVERS, chenille**
Hamilton Cotton Co., Hamilton Ont.
- TAGS, shipping and factory**
Business Systems, Ltd., Toronto.
- TANKS**
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Watrous Engine Works Co., Ltd., Brantford.
- TANNERS' SUPPLIES**
McClary Mfg. Co., London, Ont.
- TAPS**
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.
- TAP WRENCHES**
*Butterfield & Co., Rock Island, P.Q.
- TAPES, measuring**
The Lufkin Rule Co., of Canada, Ltd., Windsor, Ont.
- TAPES, paper and cloth, gummed and ungummed**
Gummed Papers, Ltd., Brampton, Ont.
- TELEPHONE ACCESSORIES**
Canadian Independent Telephone Co., Toronto.
*Northern Electric Co., Limited, Montreal, Que.
- TELEPHONE APPARATUS**
*The Canadian Independent Telephone Co., Ltd., Toronto.
- TELEPHONES, Automatic**
*Canadian Independent Telephone Co., Toronto.
- TENTS**
Mackenzie & Co., Ottawa, Canada.
Turner, J. J., & Sons, Peterborough, Ont.
*Scythes & Co., Ltd., Toronto.
- TERRA ALBA**
*Albert Mfg. Co., Hillsborough, N.B.
- TERRA COTTA (architectural)**
Toronto Plate Glass Importing Co., Ltd., Toronto.
- THEATRE CURTAINS, asbestos:**
*Canadian H. W. Johns-Manville Co., Toronto.
- THUMB SCREWS:**
*Canadian Billings & Spencer, Ltd., Welland.
- TILING, interlocking rubber.**
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
- TIMBER:**
*The B.C. Mills Timber & Trading Co., Vancouver, B.C.
- TIME RECORDERS**
*International Time Recording Co. of Canada, Ltd., Toronto.
- TIN WARE (stamped, pierced, japanned and lithographed)**
Sheet Metal Products Co. of Canada, Ltd., Toronto.
- TIRES, cycle, auto and truck.**
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
- TRADE MARKS AND DESIGNS**
Ridout & Maybee, Toronto.
- TRANSFORMERS**
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
- TRANSFORMERS, power**
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.
- TRANSFORMERS, distributing**
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.
- TOOLS, sheet metal workers**
Brown Boggs Co., Ltd., Hamilton, Ont.
- TOOLS, track**
B. J. Coghlin Co., Ltd., Hamilton, Ont.
- TRANSMISSION MACHINERY.**
*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Watrous Engine Works Co., Ltd., Brantford.
- TROLLEYS.**
*Richard-Wilcox Canadian Co., Limited, London, Ont.
- TRUCKS**
The Gurney Scale Co., Hamilton, Ont.
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
- TRUCKS, brick, tile and lumber**
*Watrous Engine Works Co., Ltd., Brantford.
- TRUNKS**
Lamontagne Ltd., Montreal, Que.
J. Eveleigh & Co., Ltd., Montreal, Que.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
- TUBING, Brass and Copper**
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
Canadian Seamless Wire Co., Toronto.
*Tallman Brass and Metal Co., Hamilton, Ont.
- TUBING, Gold and Silver**
Canadian Seamless Wire Co., Toronto.
- TURBINES, water.**
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
- TURBINES, steam:**
*The Canadian Crocker-Wheeler Co., Limited St. Catharines.
- TURBINE AND RECIPROCATING PUMPS.**
*The Bawden Machine Co., Limited, Toronto.
- TWEEDS**
Rosamond Woollen Co., Almonte, Ont.
- TWINES, binder**
Brantford Cordage Co., Ltd., Brantford, Ont.
- TWINES, cotton**
Hamilton Cotton Co., Hamilton, Ont.
- TWIST DRILLS**
Pratt and Whitney Co., of Canada, Dundas, Ont.
*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.
- UNDERWEAR**
Galt Knitting Co., Ltd., Galt, Ont.
- UNDERWEAR, imperial**
Kingston Hosiery Co., Ltd., Kingston, Ont.
- UNIONS**
*Dart Union Co., Ltd., Toronto, Ont.
*Otterville Mfg. Co., Ltd., Otterville, Ont.
- UNDERWEAR TRIMMINGS**
The Whitty Braid & Edging Co., Woodstock, Ont.
- UPHOLSTERED FURNITURE, leather and tapestries**
Imperial Rattan Co., Ltd.
- VACUUM PUMPS**
*The Bawden Machine Co., Limited, Toronto.
- VALVES:**
*Kerr Engine Co., Ltd., Walkerville.
- VALVES, for steam and water**
Jenkins Bros., Ltd., Montreal, Que.
- VALVES, regrinding globe, angle cross checks, swing checks, etc.**
Penberthy Injector Co., Ltd., Windsor, Ont.
- VARNISHES**
*Ault & Wiborg Co. of Canada, Ltd., Toronto.
Berry Bros., Walkerville, Ont.
*Dougall Varnish Co., Ltd., Montreal.
R. C. Jamieson & Co., Ltd., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal.
- VAULTS and VAULT DOORS:**
*The Goldie & McCullough Co., Ltd., Galt.
- VENTILATING APPLIANCES:**
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.
- VENTILATING SYSTEMS**
*The Canadian Sirocco Co., Ltd., Windsor, Ont.
Gurney Foundry Co., Ltd., Toronto.
- VENTILATORS:**
*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.
*Pedlar People, Ltd., Oshawa, Ont.
- VINEGAR**
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- WAGONS**
Tudhope-Anderson Co., Ltd., Orillia, Ont.
- WALL BOARD**
*Bird & Son, Hamilton, Ont.
- WALL COPING**
Standard Clay Products, Ltd., St. Johns, Que.
- WASHERS:**
*The Steel Co. of Canada, Ltd., Hamilton.
- WASHERS, plate or wrought**
London Rolling Mill Co., Ltd., London, Ont.
- WASTES, wool and cotton**
Factory Waste and Metal Co., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
- WATER-PROOF CEMENT COATING**
Benjamin Moore & Co., Ltd., Toronto.
- WAXED PAPER**
Business Systems, Ltd., Toronto.
- WEBBING, elastic**
Hamilton Cotton Co., Hamilton, Ont.
- WEBBING, non-elastic**
Hamilton Cotton Co., Hamilton, Ont.
- WHEELS**
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
- WHEELS, corundum**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- WHEELS, emery**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- WHEELS, propeller, iron and steel**
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
- WHEELS, turbine, water.**
*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
- WHEELS, water (impulse type)**
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

WELL DRILLING TOOLS AND MACHINERY

Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES

Lay Whip Co., Rock Island, Que.

WHISKY

*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC

Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL

*Berry Bros., Ltd., Winnipeg.

WHITE LEAD

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal Que.

WINDMILLS

*Goold-Shapley-Muir Co., Ltd. Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.

WINDOW SHADES

Daly & Morin, Montreal, Que.

WIRE

*Canada Wire & Iron Goods Co., Hamilton.

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
The Graham Nail Works, Toronto.

WIRE CLOTH

*Canada Wire & Iron Goods Co., Hamilton.

C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:

*Metallic Roofing Co., Ltd., Toronto.

WIRE GUARDS

*Canada Wire & Iron Goods Co., Hamilton.

C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, Insulated Electric,

*Northern Electric Co., Limited, Montreal.

WIRE, insulated electric:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE

The Dominion Wire Rope Co., Ltd. Montreal.

*The B. Greening Wire Co., Ltd. Hamilton.

WIRE, Weatherproof:

*Northern Electric Co., Limited, Montreal.

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK

C. H. Johnson & Sons, Ltd., Montreal, Que.

*Canada Wire & Iron Goods Co., Hamilton.

*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co. Ltd., Toronto.

WOOD

Standard Fuel Co., Toronto.

WOOD PRINTERS

Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical

La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SPLIT PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOL

*H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS

Rosamond Woollen Co., Almonte, Ont.

WRAPPERS, book, bottle, etc.

*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:

*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton

Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical

*The Canada Metal Co., Toronto.

* For Display Advertisement See Index Page 435

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT
115-121 SUMACH STREET TORONTO, CANADA

MADE-IN-CANADA

Toronto, Ontario

Mr. Manufacturer :—

Are you sincere in your desire to boost and make greater the British Empire by the buying of Canadian made goods? If so, look over the following list of high-grade oils, greases, compounds and paints manufactured in our oil refinery at Petrolia and our paint works at Toronto, Ontario. A postal card from you will bring you full information regarding the goods in which you are interested.

CYLINDER OIL

ENGINE OIL

MACHINE OIL

DYNAMO OIL

TANNER'S OIL

BLACK LEATHER OIL

PARRAFINE WAX

MINERAL SOAP STOCK

BENZINE

**WHITE LEAD**

READY MIXED PAINT

COLORS IN OIL

VARNISHES

BLACK JAPANS

STEEL BRIDGE PAINTS

ROOFING PAINTS

CUP GREASE

LINSEED OIL SOAP

SERVICE FIRST

"BEATTY"

Material Handling Plant

Has Constant Service built right into it.

We have successfully met the growing demands of the contracting business for Fifty Years, and our reputation is based on the Service idea.

WE MAKE

Hoisting Engines, Dipper Dredges, Clamshell Dredges, Steel Scows, Dump Scows, Drill Boats Steel Derricks, Derrick Irons, Pile Drivers, Centrifugal Pumps and the "FAIVRETTE" CLAM BUCKET.

M. Beatty & Sons, Limited

MAIN OFFICE AND WORKS: Welland, Ont.

TORONTO BRANCH: 4th Floor, 154 Simcoe Street

AGENTS:

H. E. Plant, 1790 St. James St., Montreal

E. Leonard & Sons, St. John, N.B.

Robt. Hamilton & Co., Vancouver, B.C.

Kelley-Powell Limited, McArthur Bldg., Winnipeg

INDUSTRIAL CANADA



"OUR BUSINESS IS PECULIAR"

Soliciting accounts for an advertising agency is most interesting, particularly when one analyses the reasons why some manufacturers and merchants decline to advertise.

The most common "declined with thanks" phrase, so to speak, is—"Our business is peculiar, and does not lend itself to exploitation in the same way that other businesses do."

As if any two businesses are alike! Do you know of any concern in your line, that conducts its affairs precisely as you do? No!

Neither are there any two lines that can, or should be advertised in exactly the same way.

Recently we have been consulted about advertising by

The Proprietor of a Large Hotel.
A Mail Order Clothing House.
A Guarantee Assurance Company.
A Heavy Machinery Builder.
A Ladies' Wear House.
A Builder's Supply House.
A Musical Instrument Firm.
A Linen Manufacturer.
A Fire Extinguisher Manufacturer.

Each a peculiar business!

It is our business to apply knowledge and experience gained in solving advertising problems for hundreds of different lines to the solution of individually peculiar advertising campaigns.

If, for instance, your peculiar, though common problem is getting tangible returns from a comparatively small advertising appropriation, you need the services of an agency such as ours.

J. J. GIBBONS, LIMITED

General Advertising Agents

MONTREAL

Cables—Gibjay, Toronto.

Head Office :
TORONTO

WINNIPEG

Codes—Liebers. ABC 5th Edition

PUBLISHED BY THE CANADIAN
MANUFACTURERS ASSOCIATION INCORPORATED.
HEAD OFFICE BRANCH OFFICES,

• TORONTO • MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC

MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

Automobile Parts

Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED

Walkerville, Ont.



"Giving Satisfaction"

This is the true measure of a manufacturer's service to his constituency. It has been our constant aim since we commenced to do business eight years ago. Our large and rapidly expanding trade is proof that our products and our methods of doing business appeal to our customers.

The greatest possible care and attention are given at our Refinery to the manufacture of the different lines—the highest obtainable quality being our goal. The statement "WE MAKE THAT GOOD OIL" has now passed into a proverb as referring to the products of The British American Oil Co.

We guarantee every gallon of British "Peerless" and Motor Gasolene, Benzine, Lamp Oil, Lubricating Oil, "Ford Motor Oil," "Autolene" for other motors, Fuel Oil, Road Oil and other Products.

We are prepared to live up to the guarantee that if any of our goods are not as represented they may be returned at our expense and money will be refunded if already paid for same. In no case will we allow a customer to make a loss on account of our products not being equal to representation.

We make our products as good as we know how and have justifiable confidence in them. Our customers have a right to demand value for their money and we see that they get it. We do not pose as philanthropists; this is pure business.

Our watchword is "GIVING SATISFACTION."

The BRITISH AMERICAN OIL CO., Limited

REFINERS, FOOT OF CHERRY STREET, TORONTO

Head Office: LUMSDEN BUILDING, TORONTO

Branches: MONTREAL, OTTAWA, LONDON, WINDSOR

\$'s ARE \$'s

One spent to accomplish an end is better than spending two seventy-five cents to get the same result.

This is particularly true of union pipe couplings, for, besides money, there is a saving of labor as well.

Dart Unions (and the name is cast on every one) make joints easily which stay tight and never need attention or replacing. The same union may be used repeatedly without additional cost other than the time required.

If you would gain money by saving it, get Dart Unions from your jobber, and you will have the formula. Two for one if they fail.

DART UNION CO., LTD., TORONTO

CONTENTS

	Page
Editorials	557
Organizing the Resources of Canada	562
BY B. B. COOKE.	
Transportation	566
BY J. E. WALSH.	
Insurance	567
Tariff	568
BY J. R. K. BRISTOL.	

	Page
Legislation	570
BY F. W. WEGENAST.	
How a Canadian Manufacturing City Safeguards its Workmen	571
Trade Opportunities in Russia	572
Trade Enquiries	580
Among the Industries	584

INDEX TO DISPLAY ADVERTISEMENTS

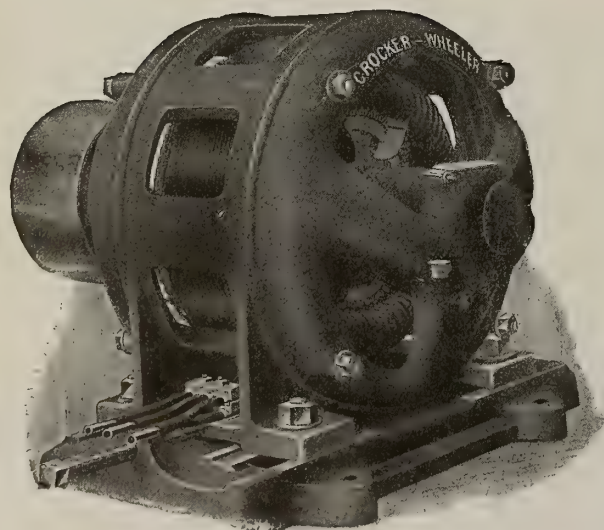
Albert Mfg. Co.,.....	536	Brown Bros., Limited	581	Canadian Sirocco Co., Limited	550
Andrews, H. V.	585	Butterfield & Co.	547	Canadian Street Car Advertising Co., Ltd..	525
Armstrong Whitworth Co. of Canada, Ltd..	531			Canadian Tube & Iron Co., Limited.....	545
		Canada Carbide Co., Limited	543	Canadian Westinghouse Co., Limited.....	555
Banfield, W. H. & Sons.....	598	Canada Metal Co., Limited	531	Canadian Winkley Co., Limited	596
Beatty, M., & Sons, Limited	610	Canada Wire & Iron Goods Co.	535	Chapman Double Ball Bearing Co. of Can-	
Berlin Machine Works	528	Canadian Appraisal Co., Limited, The....	554	ada, Limited	554
Berry Bros.	535	Canadian Bank of Commerce	580	Chicago Bridge & Iron Works	596
Bertram, John, & Sons, Limited	529	Canadian Billings & Spencer Co., Ltd....	542	Clarke, A. R., & Co., Limited	536
Beveridge Paper Co., Limited	585	Canadian Bridge Co., Limited	544	Conduits Co., Limited	601
Bird & Son	581	Canadian Car & Foundry Co., Limited....	546	Consolidated Mining & Smelting Co. of	
Boeckh Bros.	588	Canadian Consolidated Rubber Co., Ltd..		Canada, Limited, The	532
Boiler Inspection & Insurance Co., Canada	548	Outside Back Cover			
Boiler Inspection Dept., Ontario Government	596	Canadian Crocker-Wheeler Co., Limited...	524	Dart Union Co., Ltd.	523
Booth-Coulter Copper & Brass Co., Ltd., The	610	Canadian Drawn Steel Co., Limited.....	599	Delaney and Pettit, Ltd.	585
Bradstreets	584	Canadian Hart Wheels, Limited	586	Dennis Wire & Iron Works Co., Ltd.	594
British American Oil Co., Limited		Canadian H. W. Johns-Manville Co., Ltd..	533	Dominion Abrasive Wheel Co., Limited...	547
Inside Front Cover		Canadian Oil Companies, Limited	610	Dominion Belting Co.	584
		Canadian Pacific Railway Co.	583	Dominion Bridge Co., Limited	544

(Continued on next page.)

INDEX TO DISPLAY ADVERTISEMENTS—Continued

Dominion Stamping Co., Limited	540	Jeffrey Manufacturing Co.	595	Northern Electric Co., Limited	553
Inside Front Cover		Jenckes Machine Co., Limited	542	Nova Scotia Steel & Coal Co., Limited....	553
Dominion Steel Foundry Co., Ltd.	585	Jones, J. L., Engraving Co., Limited.....	601	Ontario Government Notices	549
Dominion Textile Co., Ltd.	591	Jones & Moore Electric Co., Limited	531	Ontario Wind Engine & Pump Co., Ltd....	551
Doon Twines, Ltd.	591	Jones Underfeed Stoker Co., Limited.....	548	Otterville Mfg. Co., Limited	599
Dougall Varnish Co.	Inside Back Cover				
Du Pont Fabrikoid Co.	543	Kennedy, Wm., & Sons, Ltd.	545	Page Wire Fence Co., Limited	542
Eddy, E. B., Co., The	540	Kerr Engine Co., Limited, The	549	Paterson Mfg. Co., The, Limited	556
Edward Partington Paper & Pulp Co.....	552	Leonard, E., & Sons	595	Penman's Limited	547
Elder Dempster & Co., Limited	582	London & Lancashire Fire Insurance Co.,	598	Polson Iron Works, Limited	548
Electric Steel & Metals Co., Ltd.	589	Limited		Pratt & Letchworth Co., Limited	Inside Front Cover
Eureka Mineral Wool & Asbestos Co.....	549	Lysaght, John, Limited.....	Inside Back Cover	Purdy, Mansell, Limited	598
Galt Malleable Iron Co., Limited	595	Martin Corrugated Paper & Box Co., Ltd..	552	Richards Wilcox Canadian Co., Ltd.	599
Gardner, R. & Son, Ltd.	586	Massey-Harris Co., Limited	537	Riordan Paper Co., Limited	533
Garlock Packing Co.	538	McClary Mfg. Co.	592	Ritchie & Ramsay	539
General Fire Equipment Co., Limited.....	600	McKenzie, The D., Machinery Co.	527	Rolland Paper Co., Limited, The.....	533
Gibbons, J. J., Limited....	Outside Front Cover	McKim, A., Ltd.	591	Royal Bank of Canada	580
Goderich Organ Co., Limited, The.....	599	McLaren, D. K., Limited	587	Rudd Paper Box Co., Ltd.	589
Goldie & McCulloch Co., Limited, The....	530	McLaren, J. C., Belting Co., Limited.....	587	Russell Motor Car Co., Limited	593
Goodhue, J. L., & Co., Limited	587	Meadows, The G. B., Iron & Brass Works	527	Sadler & Haworth	537
Goold, Shapley & Muir Co., Limited	581	Co., Limited		Scythes & Company, Ltd.	593
Gourlay, Winter & Leeming	539	Metal Shingle & Siding Co., Ltd.	591	Steel Co. of Canada, Limited, The	534
Grasselli Chemical Co., Limited	541	Metallic Roofing Co., Limited	601	Structural Steel Co., Limited	544
Greening, The B., Wire Co., Limited.....	541	Montreal Cottons, Ltd.	591	Tallman Brass & Metal Co.	551 and 553
Gutta Percha & Rubber Manufacturing Co.,		Montreal Lithographing Co., Limited	549	Thomson, Tilley & Johnson	542
of Toronto, Limited	Inside Back Cover	Montreal Locomotive Works, Limited.....	600	Thompson & Norris Co. of Canada, Limited	Outside Back Cover
Hamilton Bridge Works Co., Limited.....	544	Morrow, John, Screw & Nut Co., Ltd....	532	Toronto Hydro-Electric System	578a
Hinde & Dauch Paper Co., of Canada, Ltd.,		Morton, Phillips & Co.	584	Trussed Concrete Steel Co. of Canada, Ltd.	540
The	550	National Acme Manufacturing Co., The....	526	Union Drawn Steel Co., Limited	599
Howard Smith Paper Mills, Limited	551	New Zealand Shipping Co., Limited	582	Victor Saw Works, Limited.....	543
Imperial Oil Co., Limited	535	Nichols Chemical Co., Limited, The	531	Vogel, H. G., Co. of Canada, Limited.....	600
Inglis, John, Engine Co., Limited.....	579	Nicholson File Co.	594	Walker, Hiram, & Sons, Limited	597
International Time Recording Co., Ltd.	578c, 578e	Northern Aluminum Co., Limited.....	594		
		Northern Crane Works, Ltd.	589		

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INCLUDES :

Heavy Shafts

Large Journals

High Power Factor

Excellent Efficiency

They have many other desirable features ;
Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works : St. Catharines

District Offices : Montreal, Toronto, Vancouver

We Have Prepared the Way

WE HAVE SPENT thousands of dollars on Street Car patrons impressing on them the advantages of purchasing "Made-in-Canada" Products.

We were the first in the field with a "Made-in-Canada" campaign, prepared, placed and carried out entirely at our own expense, for the benefit of Canadian Street Car advertisers.

Canadian Manufacturers

who use Street Car advertising get the direct benefit of all the money we have spent, in addition to getting the greatest possible amount of the best advertising for every dollar of their own they spend on Street Car space.

There are 1,735,685 passengers carried daily on the street car lines we control throughout Canada, and with these we have prepared the way for "Made-in-Canada" campaigns.

They are ready to purchase goods made in Canada, but they have to be told what goods are made here.

At a cost of only One Dollar you can reach over 48,000 of these consumers through an advertisement in the Street Cars.

Let us tell you more about it. Any of our offices will respond promptly to a request for information.

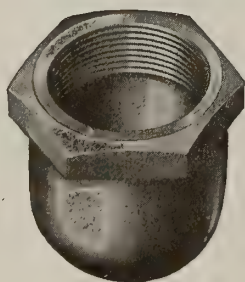
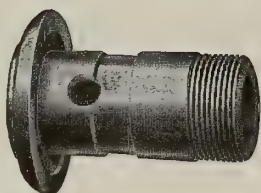
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Canadian Street Car Advertising Company
Limited

MONTREAL

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VARIETY IN CANADIAN-MADE SCREW MACHINE PRODUCTS



PRACTICALLY any kind of brass, steel and iron bar work in quantities can be handled at the NAMCO Plant in Montreal.

This includes a size range from the smallest parts up to 2 $\frac{1}{4}$ in. stock diameter by 10 $\frac{1}{2}$ in. length.

Our first consideration in manufacturing is quality—clean cutting, uniform diameters, smooth finish, accurate threads and careful cleaning and packing to insure products ready to use.

From your samples or specifications we will quote prices promptly. Also ask for "Canadian Products," a book showing some 200 jobs we have made.

If you need Standard Screws, Nuts, Studs or Hexagon Brass Nuts, your order will be filled promptly from stock listed in our Standard Milled Products Catalog. Copy on request.

The National-Acme Manufacturing Co.

De Courcelles St.
and G.T.R., St. Henri

MONTREAL, P.Q.



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Canadian National Exhibition
THIS YEAR, VISIT
OUR EXHIBIT
IN THE
Industrial Building

WE ARE SHOWING

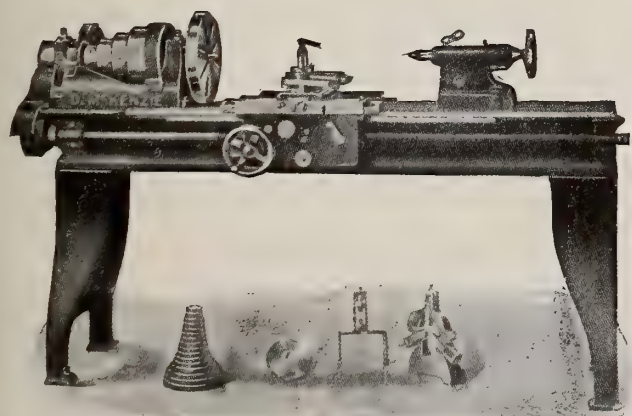
Factory and Club Lockers
Wire Guards
Wire Baskets
Wire Signs
Office Grilles
Iron Fencing
Iron Stairs
Coal Dealers' and
Contractors' Supplies

You will recognize the exhibit from this illustration.

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Wire, Iron & Brass Works Co., Limited
479 Wellington St. West, Toronto, Canada

Built-in Merit

Buy a Lathe Made in Your Own Country



14 IN. X 6 FT. ENGINE LATHE

It is a Good Lathe

Made from New Patterns of
Improved Design
Best Material

Write for our specifications



The D. McKenzie Machinery Co., Guelph, Ontario



The Owner Says—

"You'd surely be surprised with the quality and amount of work this compact little planer turns out. It's our

New Berlin Cabinet Single Surfer"

"We dress all flat surface parts of our tables, desks, veneered seats, etc., with it, varying in thickness from $\frac{1}{8}$ in. to 6 in., and as short as 12 in.

"With this high-speed small-stock machine, a man and a boy are able to put stock in a satisfactory condition for finishing in less than half the time formerly required."

"It's exactly the tool for your crowded Box-Board Plant too, as it requires less floor space than any surfacer of its capacity.

While the positive preventive against snipping the ends of stock is especially valuable where much small stock is run. Then there's the jointing device furnished for the thin high-speed knives that effects a considerable saving of grades, often as high as 40 per cent. In our work it eliminates a lot of hand-sanding and expensive refinishing of frail stock which had to be done when the old machines were used."

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"Frankly we consider it the most valuable small-stock surfacer we have added to our shop in the past five years."

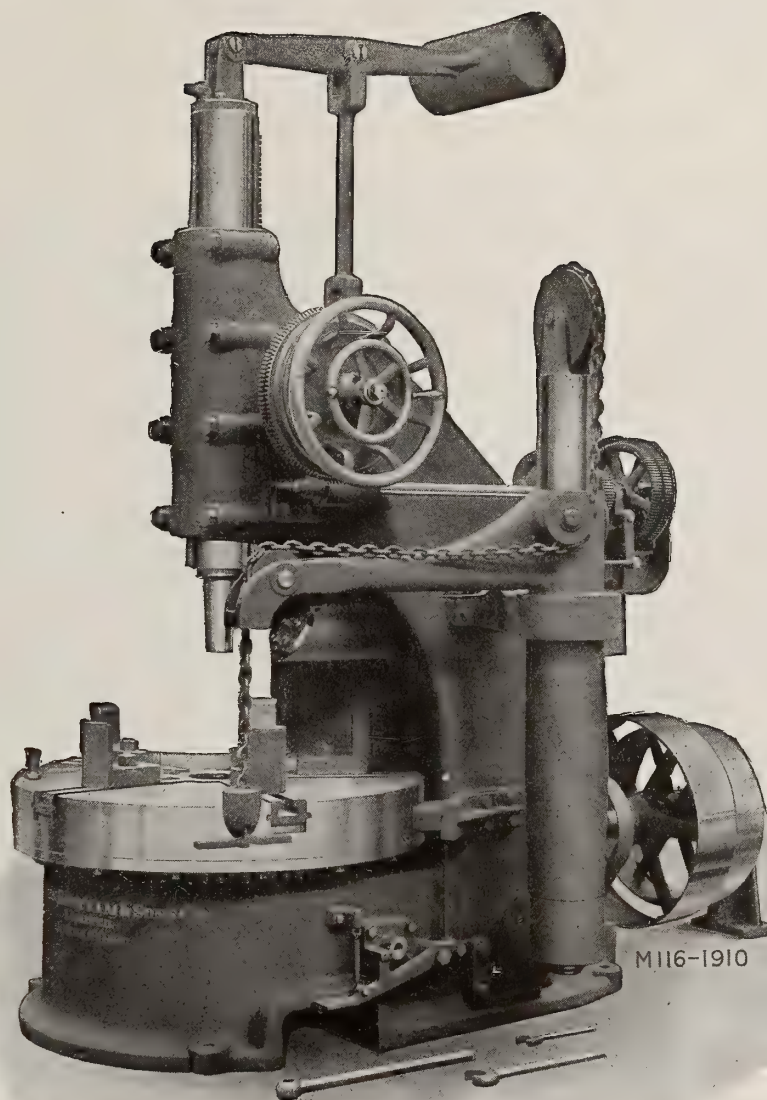
Circular and photograph of this new tool will be sent you free, on request.

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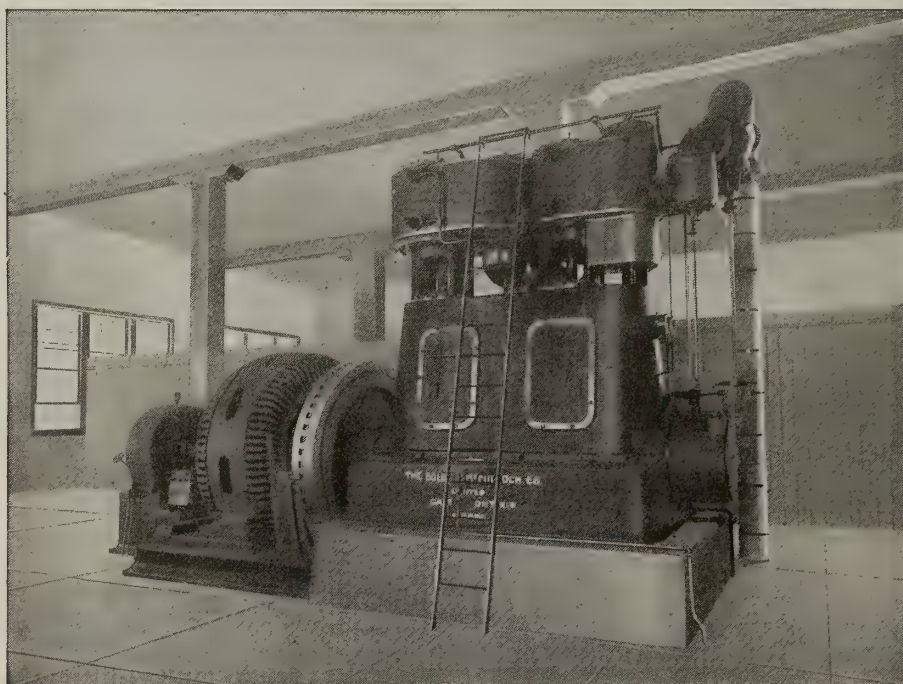
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Showing a large Two Cyl. Compound, Vertical Enclosed, Forced Lubrication Steam Engine of 300 k.w. capacity, built and installed by us for THE ONTARIO MALLEABLE IRON CO., at OSHAWA, ONT.

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have been installed in over Fifty Canadian Power Plants in less than three years which speaks well for the reception given this engine by the Engineering Profession and manufacturers in general. They are giving excellent service to their owners.

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Sulphide Soda
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Phosphate Soda

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Blue Vitriol
Sulphate Alumina
Papermaker's Alum
Caustic Soda

Bleaching Powder
Tri-Sodium Phosphate
Ammonia
Salt Cake
Tin Crystals

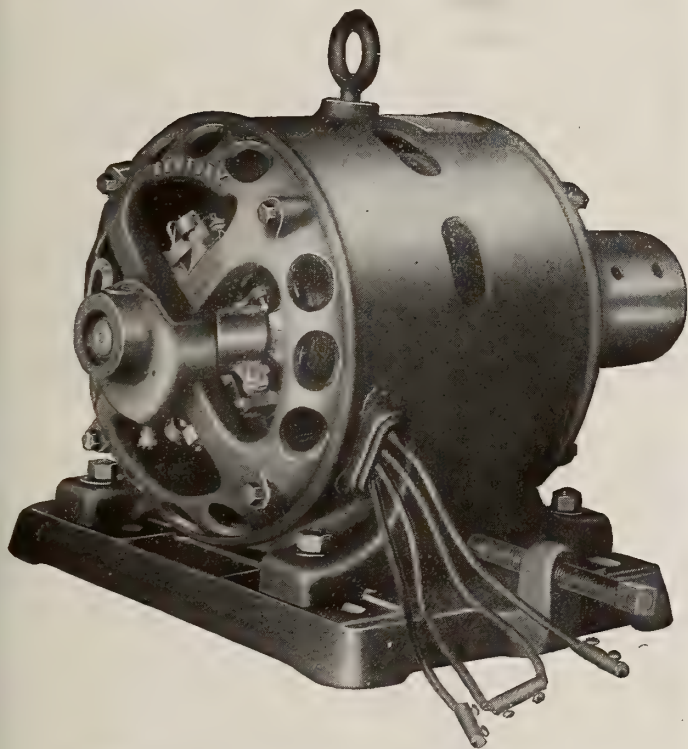
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LIMITED

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Excel-
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— AT HIGH SPEEDS

FOR HARD METALS — "TYR"
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MORROW Products are Best by Actual Tests

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Purchasers of all Classes of Ores

Producers of

TRAIL BRAND PIG LEAD

Eastern Agents: Thomas Robertson & Co., Limited, Montreal



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J-M Asbestos Roofings put an end to your Roofing Expense

These roofings are non-corrosive as well as weather-proof and time-proof and will last for a generation.

Some in use for twenty or thirty years—and still good!

Contain no organic material—made only of Asbestos Fibre and Trinidad Lake Asphalt. Never need painting. Are fire retardant almost to a fire-proof degree, and non-conducting.

Furnished in "Built-up" type for flat roofs and in "Prepared" type for sloping roofs. J-M Asbestos Built-up Roofing has a smooth surface and is very much lighter than tar-and-gravel. Your own men can easily lay J-M Asbestos Ready Roofing with J-M Vise-Grip Roofing Cleats and make a perfect job.

Register your J-M Roof with us and we will see that it gives you full service under J-M Roofing Responsibility. Ask about this.

The Canadian H. W. Johns-Manville Co., Limited
TORONTO MONTREAL WINNIPEG VANCOUVER



*Miami Copper Co.,
Miami, Ariz*

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LARGE VARIETY BUILDING PAPERS

Can be shipped from stock on hand at Merritton.—Grey, Blue, White, Brown, also Hawkesbury Impervious Sheathing



Riordan Paper Company, Limited
MONTREAL CANADA

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Rolland's Papers

For your next supply of Letterheads, Office Stationery, Blank Books, Loose Leaf Ledgers, etc.

Ask your Printer to show you our selection of Bond, Writing and Ledger Papers. It is the most complete. It contains a paper for every use.

If you are looking for 100% value and quality, ask for our brands. Every Printer and Lithographer in Canada will supply them. Samples on request.

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HIGH-GRADE PAPER MAKERS

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Our Sacred Duty

To contribute to a Fund for the relief of the unemployed does not discharge or liquidate the duty we owe to the brave men who are sacrificing their lives in the Trenches that we may live and enjoy the Blessings of Liberty and Happiness.



Better by far that we extend our Charity in an effort to use in our Mills, our Factories, in our Cities and our Homes all over this fair land, the products that Canadian labor produces, so that when the Boys come marching Home, they will be welcomed back to a Prosperous and Happy Canada.



Their sacrifice is worthy of our greatest effort—Our Duty is Plain; Canada with Canadian Labor and Capital can produce, manufacture and distribute, products sufficient to keep the Wheels of Industry Turning to the limit. The song of Prosperity and Happiness should ring out all over the land.

Let us sincerely pledge, to the extent of our needs, to purchase materials produced in Canada by Canadian Workmen, and the result of our efforts will return to us the Blessings of a Prosperous and Happy Nation.

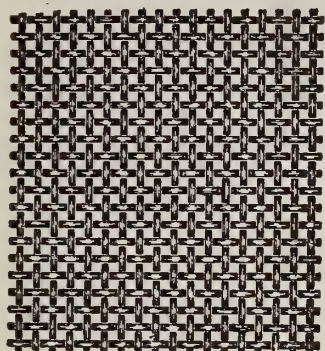
The Steel Company of Canada, Limited

Hamilton - Toronto - Montreal - Winnipeg



Canada Wire & Iron Goods Co.

HAMILTON - - CANADA



Manufacturers of
Double Crimped
Wire Cloth and
Wire Screening
for all purposes of
Iron, Brass, Copper,
Bronze, Galvanized
and Tinned Wire,
etc.

There is no kind of Wire Fabric required in the production of any machine or manufactured article that we cannot furnish.

We also manufacture:—

Bank and Office Grilles and Ornamental Iron
Work in all finishes.

Wire Guards for Factory Windows, Moulders'
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Factory Stools and Metal Lockers.

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Correct lubrication for
your motor is as neces-
sary as proper food
for your body.

Don't wear out your
motor by using the
wrong oil.

Polarine assures freedom from breakdowns
and easy motoring under all conditions of
load and temperature.

The Imperial Oil Co.,

Limited

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The trademark of Berry Brothers always inspires confidence as the consumer knows it is a guarantee of quality.

Whether you are a dealer or a consumer, our experience of nearly 60 years qualifies us to meet every possible varnish want.

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(INCORPORATED)
World's Largest Varnish Makers

Established 1858

WALKERVILLE, ONT. (104)

ALWAYS USE
Hammer Brand Plaster of Paris

Manufactured for Half a Century—the Standard of Excellence



Try it and Compare
 Its Surface Covering Capacity
 With Other Brands

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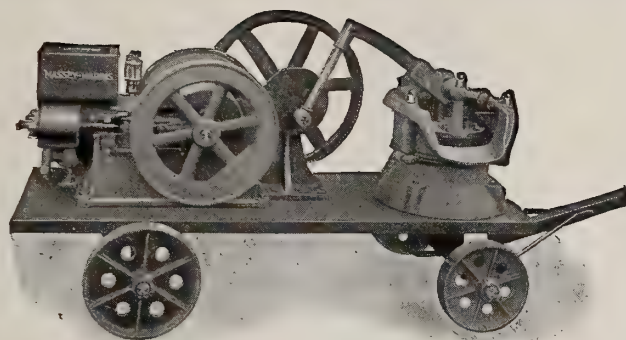
The Largest Patent Leather Manufacturers
 in the British Empire

A. R. CLARKE & CO., LIMITED

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Helps for the Contractor

When you need a pump to take the water out of an excavation, or to furnish a supply of water, get a

MASSEY-HARRIS Direct - Connected Pump

consisting of a Massey-Harris Gasoline Engine, geared to a Goulds Diaphragm Suction Pump, or a Goulds Plunger Pump, stationary or mounted on a hand-truck.

If in need of a hoist, get a

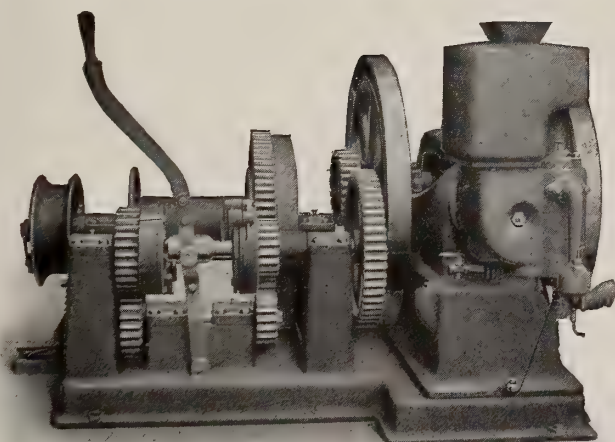
MASSEY-HARRIS Direct - Connected Hoist

Powerful—Safe—Easily Handled.

MASSEY-HARRIS CO., LIMITED

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Branches at Montreal, Moncton, Winnipeg, Regina
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AGENCIES EVERYWHERE



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is the time we have spent in
Canada in the manufacture of

BELTING

We have concentrated
on three things

MATERIALS WORKMANSHIP EXPERIENCE

As a result we have
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"CLIMAX"

AND

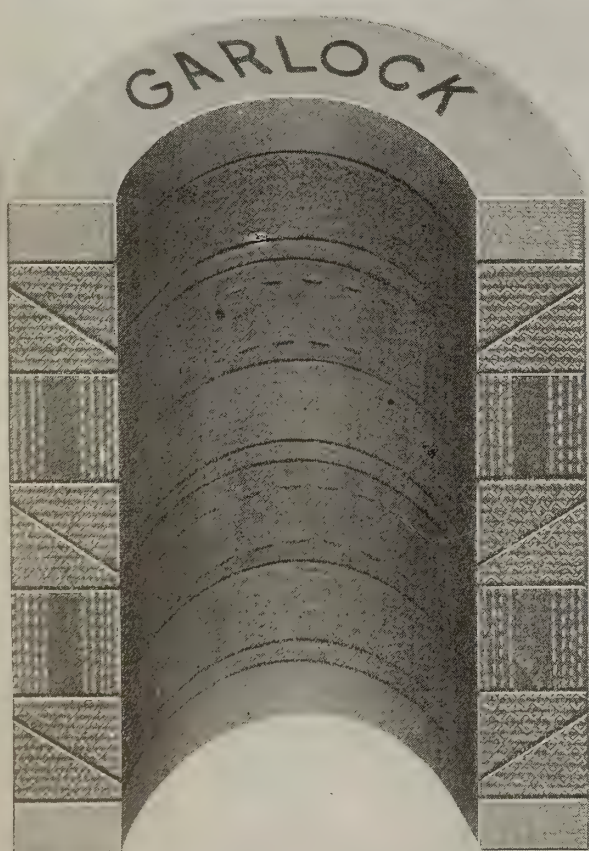
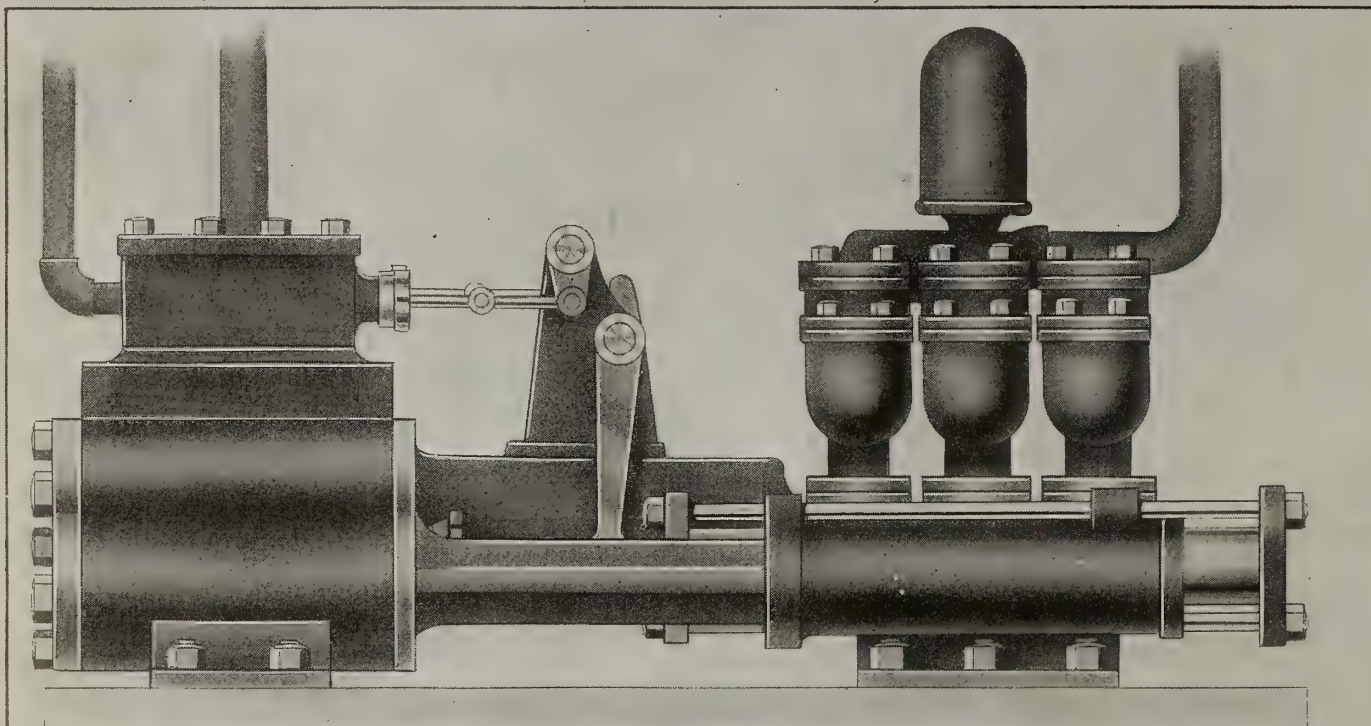
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Write for catalog describing our many styles and combinations of packing.

THE GARLOCK PACKING COMPANY, Hamilton, Ont.

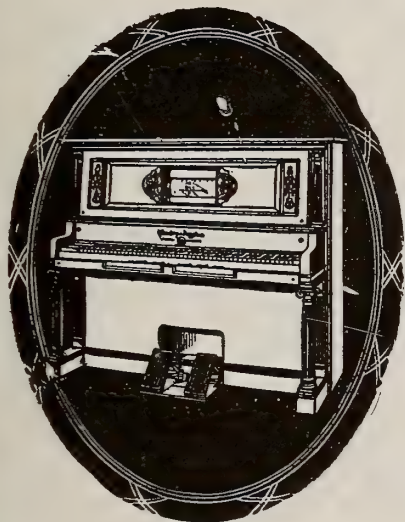
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Men forget business cares in the enjoyment of

Gourlay-Angelus

Player-Pianos



A GOURLAY-ANGELUS provides ANYONE with the ability to play ANY music artistically.

In the opportunity for recreation thus afforded, many busy men find enjoyment hitherto undreamed of, as well as a complete rest from the business worries and cares of the day. If you find it hard to leave these cares behind you when you go home, depend upon it, a Gourlay-Angelus will make you forget them.

One Toronto manufacturer tells of this pleasure in a Gourlay-Angelus as follows:—"I have always been glad I purchased the Gourlay-Angelus. The longer I have it the more I enjoy it and the more I use it."

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188 Yonge St., Toronto

RED SEAL



LUXACOTED PORCELAIN

For Illustrated Catalogues,
Instruct your Printer to use
the Best Coated Paper.

IT'S MADE IN CANADA BY
RITCHIE & RAMSAY, Limited
TORONTO

HINTS TO SMOKERS.

Since the advent of the Non-Poisonous Match, it is decidedly advisable to always carry a match box with one, as the new match will not, generally speaking, light well on a cloth surface.

EDDY'S offer you just the thing in their "Pony Silent" or their "Little Comet" match.

Put up in conveniently small, well-sanded boxes, just the size for the vest pocket, "PONY SILENT" is essentially the SMOKER'S MATCH.



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DAYLIGHTED WITH KAHN STEEL SASH

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WIRE GUARDS FOR FACTORY AND MILL WINDOWS

Protect your operatives from
injury by the use of Wire
Machinery Guards

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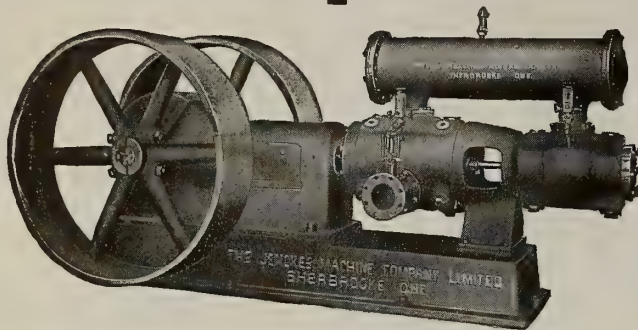
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Sulphuric, Muriatic and Nitric Acids, and Aqua Ammonia, both Commercial and Chemically Pure; Mixed Acid, Acetic Acid, Glauber Salt, Salt Cake, Silicate of Soda, Caustic Soda, Soda Ash, Hypo-Sulphite of Soda, Bi-Sulphite of Soda, Sulphide of Soda, Calcined Magnesite, Chloride of Magnesium, etc., etc. Grasselli Arsenate of Lead and Lime Sulphur Solution.

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EFFICIENT, RUGGED

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Canada**



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rolls if preferred

For Concrete Road Pavement, Walks, Building Floors, Etc.

We are the *originators* of this wire reinforcement in flat sheets, and it is coming into universal use wherever introduced. We have supplied many carloads of it this past season.

The standard mesh for road pavement is 6 x 12 inches; for bridges and building floors, the standard is 3 x 6 inches. Also, other meshes as desired. All sheets 4 feet wide, and any length specified that can be loaded in cars.

Samples will be sent upon request

We also supply Iron Fences, Fire Escapes, Office Wire Work, and all kinds of Builders' Wire and Iron Work.

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TORONTO MONTREAL WALKERVILLE ST. JOHN, N.B.



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REG. U. S. PAT. OFF.

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Coated Splits

FOR ALL KINDS OF UPHOLSTERY

BY actual test FABRIKOID is shown to be twice as strong as the best grade of coated splits, yet has the same grain, color and luxuriousness of the finest leather. FABRIKOID is water, grease and weather proof.

For service, satisfaction and economy, buy FABRIKOID upholstery.

Samples on request.

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DEPARTMENT 453
TORONTO - - - ONTARIO

A NEW
Metal-Cutting
Machine Tool

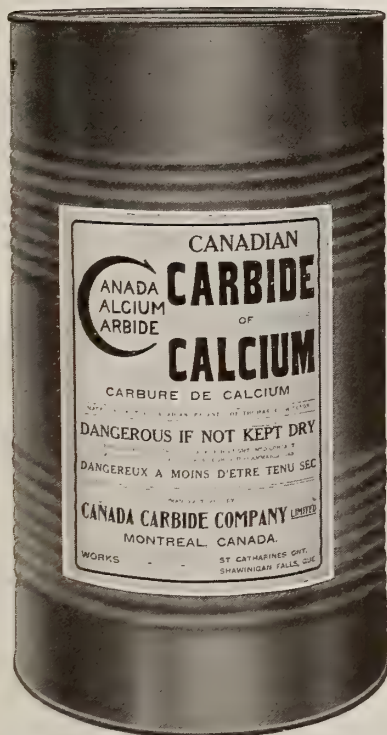
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Hamilton, Ont.

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CANADIAN MADE"

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CANADIAN Carbide made in Canada from high grade materials and by experienced workmen. We have all sizes ready for prompt shipment and guarantee quality.

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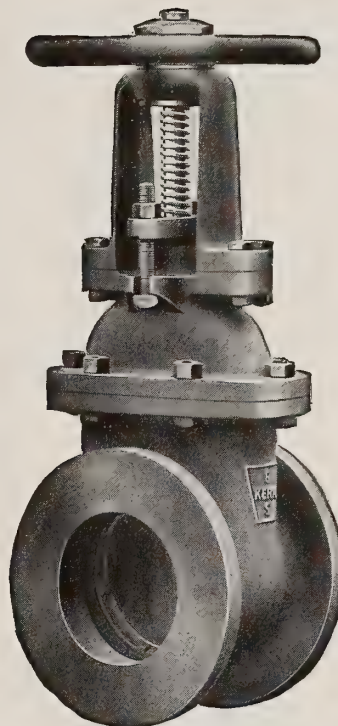
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Everyone operating a STATIONARY steam plant of 50 h.p. or over in the Province of Ontario must hold a Stationary Engineer's Certificate from the Board of Stationary and Hoisting Engineers. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary and Hoisting Engineers' Act.

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Application forms for obtaining STATIONARY or HOISTING Engineers' Certificates, may be had upon applying to the Chairman.

Hon. JAS. S. DUFF,
Minister of Agriculture.

W. C. McGHIE,
Chairman of Board.

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Ontario:



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H. A. CLARK, 432 Woodman Avenue, London.
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MISS MARGARET CARLYLE, Parliament Buildings, Toronto.
MRS. A. BROWN, Parliament Buildings, Toronto.
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H. J. TUTT, 13 Enderby Road East, Toronto.

Persons having business with any of the Inspectors will find them at the above address. HON. JAS. S. DUFF, Minister of Agriculture. Phone Main 5800.

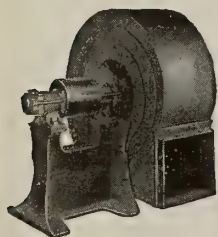
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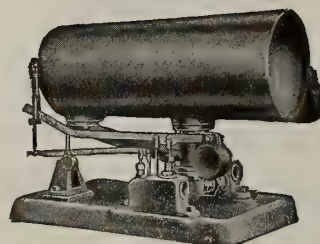
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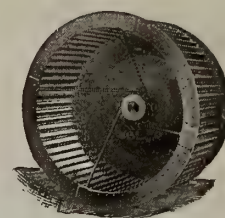
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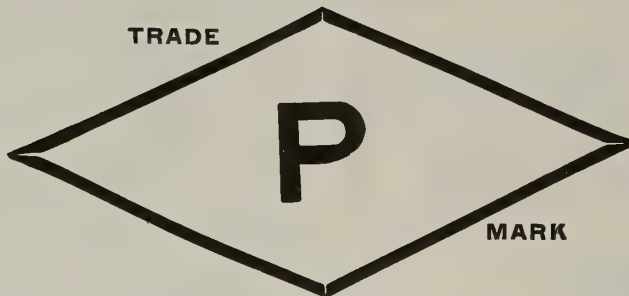
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Are made from special fibre stock, and are constructed so as to protect the goods from damage or breakage. At the same time saves 75 p.c. of weight of wooden cases.

These boxes comply with the freight classification and are accepted at the same rate as goods packed in wooden boxes. Can be used for shipping by freight or express any goods in reasonable weight package.

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This illustration shows how the insulation of each cable is subjected to a high potential test of several times the normal operating voltage.

Our new factory is splendidly equipped with all apparatus necessary for the testing of raw materials and the finished product.

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Your present line shafting is consuming from 15% to 60% of your power.

The Chapman Double Ball Bearing will save this waste and turn it into productive energy.

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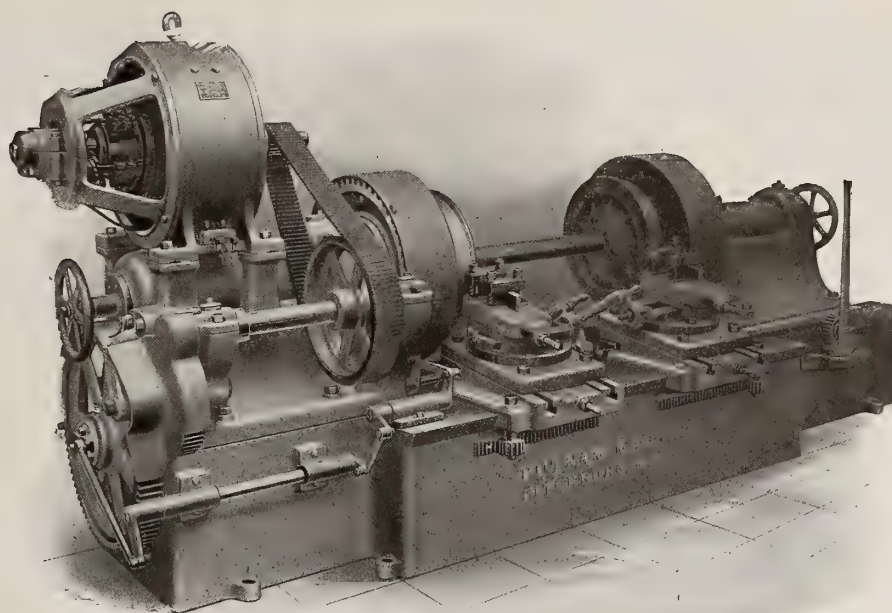
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can only be obtained by combining a reliable machine tool and a properly designed adjustable-speed motor.

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Barrett Specification Roofs

Made in Canada

Use the *Barrett Specification* straight!

There are architects, engineers and owners who still allow their contractors to lay slag or gravel roofs their own way, subject only to general description. Such easy-going specifications are not fair to honest bidders. They invite the use of poor materials and workmanship.

Even if the use of labelled and reputable materials is required and a five-ply roof is specified, a mere difference in the procedure of application may lead to unsatisfactory results.

The Barrett Specification provides the easiest way to insure satisfaction.

In the words of the Underwriters' Laboratories, Chicago, Ill., which recently completed an exhaustive and most gratifying investigation of Barrett Specification Roofs:

"These roof coverings are less likely to be defective as a result of improper workmanship than other roofings of the type."

Special Notice

We advise incorporating in plans the full wording of The Barrett Specification in order to avoid any misunderstanding.

If any abbreviated form is desired, however, the following is suggested:

ROOFING — Shall be a Barrett Specification Roof laid as directed in printed Specification, revised August 15, 1911, using the materials specified and subject to the inspection requirement.

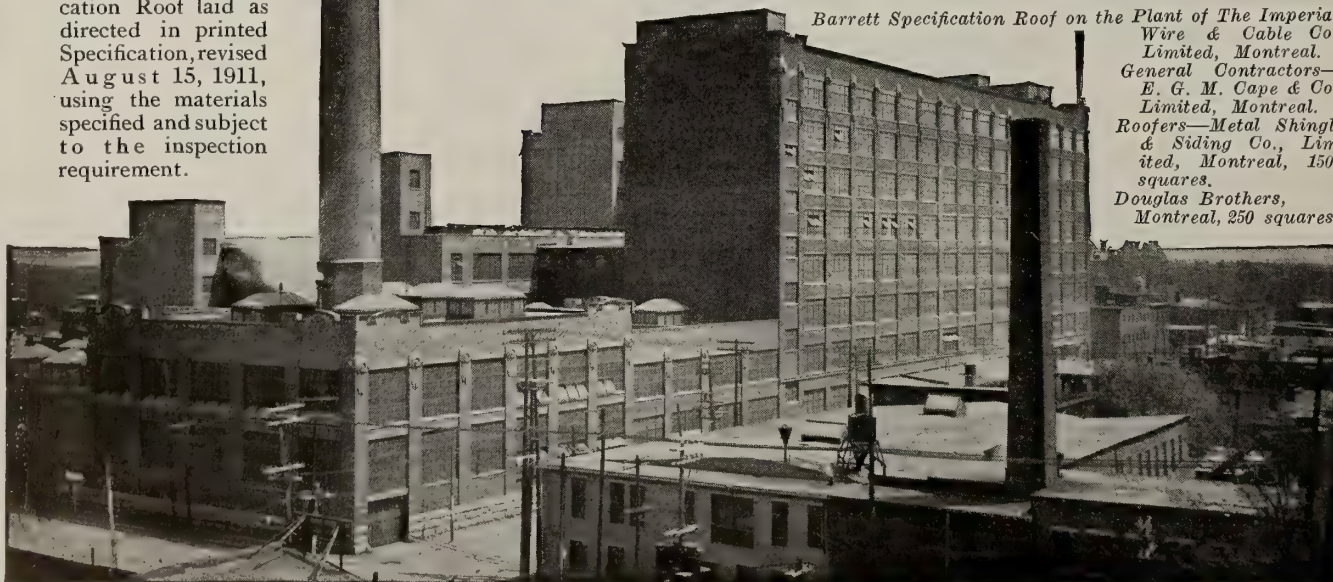
The Barrett Specification provides, in addition, a method of inspection after the roof is laid by exposing a sample cross-section so that the completeness of the work is easily ascertained.

Insist that The Barrett Specification be included *in full* in the roofing specifications and you'll be ordering a roof that will cost less than any other kind because it will give protection and satisfactory service for twenty years or more. These roofs take the base rate of insurance.

A copy of The Barrett Specification, with roofing diagrams, free on request.

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INDUSTRIAL CANADA

ISSUED BY

The CANADIAN MANUFACTURERS ASSOCIATION.

INCORPORATED.

Vol. XVI

TORONTO, SEPTEMBER, 1915

No. 5

INDUSTRIAL CANADA

Issued monthly as the official publication of the Canadian Manufacturers Association (incorporated), and devoted to the advancement of the industrial and commercial prosperity of Canada

SUBSCRIPTION

Two Dollars per Year Single Copies 20 cents
Advertising Rates made known on application

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Ocean Freight Rates.

IT is reported on good authority that, during July and August, export inquiry and export tonnage have fallen off to such an extent that there is slightly more steamship accommodation offering than there is traffic to fill it. The same authority states that the steamship companies have assured the Government that there will be plenty of tonnage to provide for fall business. If this information is accurate it will be very welcome to manufacturers who are intending to export goods. The withdrawal of many vessels from transportation routes and the consequent shortage of accommodation, with the inevitable increase in freight rates, formed serious obstacles to the development of export trade. It naturally occurs to one in considering the above statements that the rates for carrying ocean freight should immediately go down. So far there does not seem to have been any general decrease. As there is still a pronounced shortage of certain kinds of tonnage, it may be that the surplus which has been recently reported is not the sort which is required. For example, there is a decided shortage of ships equipped with refrigeration systems for the carriage of perishable

goods. We venture to predict that fall requirements will demand more than the available tonnage, and we trust that Sir Robert Borden's investigation of ocean transportation will result in a reduction of rates.

The Missing Fire Marshal.

IN May, 1914, the Ontario Legislature authorized the appointment of a Fire Marshal for the Province as the result of a long and persistent campaign on the part of the Canadian Manufacturers Association, Insurance Companies and Boards of Trade. Fifteen months have passed and no appointment has been made. We would like to remind the Ontario Government that they found it necessary to impose a levy of an additional mill upon all the taxable property in the Province for war purposes. Ontario's annual fire loss amounts to about \$8,000,000 and it is certain that the greater part of it is the direct result of carelessness which exists through the lack of a preventive authority such as a Fire Marshal. In addition to taxing the property of the Province the Government should also take steps to prevent the destruction of part of the very property they are taxing.

Where is the Eastern Rates Case Decision?

THE Eastern Rates Case was closed by the Dominion Railway Commission on June 30, 1915. The judgment is awaited with a good deal of concern by the shippers and receivers of freight as well as by the carriers. The pleasant summer days have slipped past without any sign from Ottawa that this weighty problem is nearing solution in spite of the fact that immense interests are involved.

A good example has been set in dealing with a similar case by the Interstate Commerce Commission, which heard the last of the evidence in the application of United States railways west of Chicago for rate increases on June 26, 1915, and rendered judgment on July 30, 1915. The United States railways asked for increases which would yield \$10,000,000 annually, but the Commissioners gave them only a million. This judgment is awaited with considerable interest as only two applicants out of the eleven who asked for increases submitted evidence.

Moving the Wheat.

A VAILABLE information seems to indicate that the railways have made adequate provision for moving the wheat crop to tide water. When the Western farmer is relieved of the anxieties connected with harvesting and threshing his crop his next anxiety is the uncertainty which surrounds the rate which he will have to pay for transportation. West of the head of the lakes the maximum rate is fixed by the Dominion Railway Commission; east of the head of the lakes the rate is affected by the amount of tonnage. This year the war has created a certain degree of scarcity of tonnage and consequently the rate for shipping wheat east of the head of the lakes may be slightly higher, although we hope that this will not be the case. There is danger of cargoes being taken away from Canadian shippers and sent via the Buffalo route, which would be of course an injury to Canadian shipping interests. The task of transporting probably more than the usual tonnage with a reduced number of vessels so quickly and cheaply that the Buffalo competition can be successfully combated is one which will tax the resources and energy of the lake freighting companies, and we hope that they will be successful in accomplishing it in a manner which will be as satisfactory to the western grain grower as to themselves. Contracts are already being made for October deliveries to Georgian Bay at 3 cents and over—higher than ever before for that month.

Operating Three Transcontinentals.

AN announcement has been recently made in the press that Sir William MacKenzie and a party of officials from the Canadian Northern Railway left Toronto for the Pacific Coast over their own road. This means that a third transcontinental railway is open for traffic since there is already rail communication between Quebec and Toronto. Whether or not the new transcontinental will be operated at the present time has not yet been announced, but there is no doubt that it will eventually compete for Pacific Coast traffic. Stop to consider the significance of this announcement. The United States had a population of over 40,000,000 people before they had two complete transcontinental lines. Canada has three complete transcontinentals with a population of 8,000,000. How are our three transcontinentals to be supported? This is our great transportation problem. The answer of the railways seems to be: "Borrow more money and raise the freight rates." This policy served while it could be carried out but it will be difficult to continue it at the present time.

The tendency on the other side of the border, so far as freight rates are concerned, is all the other way. Rates in contiguous United States territory were reduced in July last on all rail routes to the Pacific Coast with respect to a large number of commodities in order to meet the competition of the Panama Canal. It is understood that negotiations are now under way which will bring about a further reduction. In view of these facts it seems im-

possible that Canadian railways will be able to increase their rates to the Pacific Coast. In fact it will be difficult to maintain them at their present level and there are strong indications that they will be reduced. The railway companies will have to realize that the days of huge bonuses for construction purposes are past and that large and varied dividends to shareholders will not be so common during the coming ten years as they were in the last ten years.

They have built their roads—with a good deal of assistance from the taxpayers. The task of operation may be as great as that of construction.

Another Fraudulent Canvasser.

MANUFACTURERS are unpleasantly familiar with the alleged representatives of labor who canvass them for subscriptions.

The method by which one manufacturing firm of Montreal was victimized has been recently exposed. This firm for several years had subscribed to a souvenir which it supposed was being published by the "Switchmen's Union." The collector finally disappeared, but another came in his place stating that his predecessor, through illness, was unable to attend to the pleasant duty of extracting funds from the manufacturer, but that he was able and willing to perform the operation. The manufacturer's suspicions were aroused and he wrote to the Secretary of the Union in Buffalo. The reply stated that neither the sick man nor the genial substitute was known to the Union, but that a man of the same name had been operating through the country collecting funds and subscriptions illegally. Further, the Secretary stated that the Union had never published a souvenir or publication of any kind in Canada as their constitution prohibited any canvassing of this nature, unless it was done by a local lodge of the Union with the consent of the Grand Board of Directors and the International President after the solicitor had given bonds for the faithful performance of his duty. In this case the Union had no lodge in Montreal. It is only another example of the frauds which are being constantly practised by alleged representatives of labor. The canvasser should be always required to show his credentials.

Toronto's Headless Fire Department.

AFTER six months of ineffectual wrangling, the City Council of Toronto has failed to provide a new head for the Fire Department, although many attempts to elect candidates have been made by various factions. In the meantime taxable property in the city, valued by the Assessment Department at \$565,000,000, is jeopardized. The Executive Committee of the Toronto Branch of the Canadian Manufacturers Association has forwarded a strongly worded letter to the Mayor asking for the appointment of a fire prevention and fire fighting expert who would organize and administer the department on a business basis. Whether this wise counsel will prevail against the sinister influences which have held sway up

until the present is a matter of speculation, but at any rate the manufacturers of Toronto have shown the way to a satisfactory solution of the difficulty.

Fixing Responsibilities for Fires.

THE Legislature of Pennsylvania has recently passed an act which provides punishment for those whose negligence is responsible for fires. One of the penalties makes the offender liable for the cost incurred by the fire department in putting out the fire. This step is in accordance with the spirit of a resolution recently passed by the National Fire Protection Association, advocating that the European practice of making those who cause fire pay for the damage should be adopted on this continent in the hope of reducing our fire losses.

The Need of Organization.

AT no time in the commercial history of Canada was there greater need for organization than at the present time. Our great industrial system, which developed with such amazing rapidity, is being subjected for the first time to a test of extraordinary severity. Only by co-operation and organization can the manufacturers of this country maintain it in a condition of efficiency and bring it safely through the present depression. The war has shown what organization can do and even more clearly what havoc the lack of organization can work.

Dealing with the indifference displayed towards the necessity for co-operation, the *Birmingham Chamber of Commerce Journal* comments bitterly upon the action of one of the members of the Chamber who, in response to repeated applications extending over two years, remitted a small sum for arrears of subscription, and in doing so intimated that as he had never been helped in his difficulties it was useless for him to remain a member.

"Let us see what the Chamber of Commerce had done for this man and others during the period for which the subscription was due," says the *Journal*. "It had, to take a single instance, watched and considered all commercial legislation introduced into Parliament, and had taken such action as appeared to be necessary to protect commercial interests. We venture to assert that the actual cost of this work alone, if done by any individual firm—including the cost of obtaining prints of legislative proposals, postages, letters to Government Departments and members of Parliament, and journeys to London—would have exceeded the amount of the subscription several times over. And yet this is only one item. Many others could be named, such as watching foreign and colonial legislation, Customs regulations, railway and transport questions, and other matters, attention to which on the part of individual firms would require the appointment of one or more experts."

"As in State matters, so in purely commercial matters, we have too long prided ourselves upon the value of our

individualism, but we have consistently forgotten that individual power is intensified by collective action, that great results can only be obtained by combined effort, and that success must always depend upon unity of thought and of action. When we speak of success we do not mean the success of the individual—we mean national success; and we venture to assert that however great may be the success of this individual or that in an unorganized or incompletely organized State, it could hardly fail in the long run to be much greater in a country with a higher and deeper organized system. Evidence abounds on every hand that the most successful businesses are those which are the most efficiently organized; those in which every section has been arranged on a scientific method. And so, also, must it be with communities. There must be co-operation and co-ordination in regard to matters which are of common interest to all, as it is only by these means that waste of effort can be avoided and really effective work done."

The Birmingham Chamber of Commerce has existed over a century; it has over two thousand members but the *Journal* claims that, if the business men realized the need for co-operation, the Chamber would have ten thousand members.

What has been said with reference to the Birmingham Chamber of Commerce applies with even greater force to the Canadian Manufacturers Association. Why should any Canadian manufacturer refuse to join the ranks of the Association at a time when the future of the whole industrial system of the country is in the balance? Why should any member drop out for any reason other than real inability to pay fees? This is not a time for indifference or for leaving work to be done by others. The question is, Shall we maintain and improve our industrial position or shall we falter and go backwards? The loyalty of the members of the Canadian Manufacturers Association during the past year has been splendid. The Association showed a net increase of membership but there is still a small minority who are not yet convinced of the necessity of organization; and apparently conviction can only be brought home to them by the persuasion of fellow manufacturers, which we trust will be immediately and persistently applied.

Waterways Should be Competitors.

WHEN completed, the Erie Bridge Canal and connected waterways from Buffalo to New York City will have cost the State of New York \$340,000 a mile, or a total of \$135,000,000, according to Prof. Moulton of the University of Chicago, in an article published in the *Journal of Political Economy*. The purpose of building this canal was to reduce the cost of transportation to the public by bringing water transportation into competition with railways. The *Railway Age Gazette*, in commenting on the cost of the canal, states that the four railways directly competing with the Erie Canal are the Erie, the New York Central, the

Lehigh Valley and the Lackawanna, which have outstanding capitalization per mile as follows: Erie, \$208,843; New York Central, \$162,222; Lehigh Valley, \$108,363 and Lackawanna, \$44,424. According to Prof. Moulton's estimate, the cost of developing the competing waterway will be 63 per cent. greater than the average capitalization per mile of the Erie Railway, the highest capitalized railway in the United States. "If the part of the bill which the public pays as well as the part which the shippers pay be included, the cost of transportation on the Erie Canal will be very much greater than on any of the competing railways," says the *Railway Age Gazette*. "The expenditure of money on waterway development with such results is not economics or business. It is simply indefensible waste of the public's money for the benefit of the politicians who pass the legislation and the shippers who are expected to use the railways."

The *Railway Age Gazette*, although it is probably more friendly to the railways than to their competitors, nevertheless raises a point of great importance. If water transportation does not really compete with land transportation, consumers, who pay the freight bills, benefit nothing from public moneys which are expended on building canals and improving water ways. The basic reason for such expenditures is to reduce the cost of transportation, otherwise immense sums of public money are diverted for the benefit of private individuals. Moreover it is lost for pur-

poses of taxation, a fact which is pointed out by Prof. O. D. Skelton of Queen's University in the last number of the *Queen's Quarterly*. "Years ago," he says, "we adopted the policy of making the canals as free as the roads of the country in the interests of cheap transportation."

Doubtless, the transportation companies which use Canadian waterways compete with our railways, but the extent of this competition and its effect upon consumers is a subject which will endure exhaustive and detailed investigation.

Attacking the Steam Whistle.

IN commenting upon the recent order of the Board of Railway Commissioners forbidding the railway locomotive engineers to use the steam whistle within cities except for the purpose of warning people in danger, the *Toronto Globe* advocates that the City Council should pass a by-law absolutely forbidding the use of steam whistles in factories. "That senseless and useless custom originated at the time when Toronto was so small that all employees in a factory could be reached in this way and warned to begin work for the day," says the *Globe*. "Toronto has now at least one timepiece in every house and most of the factory employees live too far from work to hear or distinguish their own factory whistle. There are thousands of helpless invalids in every large city to whom the sound of scores of steam whistles is a fearfully torturing infliction."

The *Globe's* desire to exterminate the steam whistle immediately is so radical that we suggest, as an alternative, that manufacturers be advised to consider how necessary a steam whistle is in a factory. It is no doubt a fact that the increase in the use of timepieces and time recording devices has reduced the necessity of a steam whistle to a great extent. Factory employees now leave home guided by their own timepieces or by the many public clocks which can easily be seen in all large places, while the stimulus of the time recording clock which punches their time cards is probably as effective as the blast of a steam whistle. In some places, however, for example, where a large number of the employees in a factory are foreigners, the language of the steam whistle is easily understood. The point raised is only one of many connected with the problem of reducing the number of unattractive features of industrial life. The old idea of a factory was that it was a dirty place, poorly ventilated, unsanitary and disagreeable, but that these were necessary evils. A factory town was considered to be a most undesirable place to live in. Industrialism as applied to a community was a reproach. Of late years a great change has been taking place. The object now is to make a factory attractive. Many factories in the United States and Canada are surrounded by beautifully kept grounds, and lawns well planted with flowers; the walls are covered with vines, the interiors of the buildings are well ventilated, well lighted and equipped with conven-



MR. D. A. THOMAS

Famous Welsh Mine Owner, who is now visiting Canada under the authority of the British Government in connection with the purchase of war munitions

worth of "fancy goods"; three million dollars' worth of glass; nearly four million dollars' worth of hats, caps and bonnets; thirteen million dollars' worth of wood and the manufactures of wood!

No doubt a volume could be written in explanation of each of these items of Canadian import. And yet, in spite of the lack of certain clays in Canada could not Canadians have made at least some of those bricks? Or a few miles of that twine? Or part of that electrical apparatus or "fancy goods"? Or—in spite of the glass trust in the United States—some of that glass? Or hats? Or manufactures of *wood*? How much of the import of manufactured goods was due to American specialization? Must the Canadian workman who is ambitious to reach the top of his trade in, say, wood-working, be forced to go to the United States to find his highest usefulness? Will time reduce these imports? Or are Canadian consumers slow to realize the folly of adding to our adverse balance of trade—our account with the world at large—even a single item like a toothbrush or a cake of soap that might have been bought from a Canadian workman?

But what are these other items charged against our credit and our heavy exports of raw materials? Here is an import of one million dollars' worth of animals. Fourteen million dollars' worth of breadstuffs. One million dollars' worth of fish. Fifteen million dollars' worth of fruits—only part of them tropical fruits. Almost a million dollars' worth of *grease*. Thirteen million dollars' worth of hides and skins. Close to six million dollars' worth of *provisions*. Two million dollars' worth of seeds. One million dollars' worth of soap. About three million dollars' worth of *vegetables*. And twenty-five million dollars' worth of *wool*! Are not these the things that every agricultural nation is supposed to provide for itself? Is there not a resemblance between these purchases and those of the young and thoughtless wife who goes to a retailer to buy shoes for the baby when her husband, a shoemaker, is around the corner betting on a real estate hand-book? A farmer who sent to the city to buy grass to feed his horse would soon end his farming. To pledge his credit and give his eggs and his wheat for necessary goods like a reaper and a windmill would be reasonable; but to reduce his credit by buying what should grow in his fence corners would be worse than folly. A nation that claims great agricultural endowments, boasts of its pastoral destiny, and in some quarters holds aloof from mere industrial ambitions—yet unable to feed itself—can scarcely lay claim to efficiency of organization.

The seriousness of inefficiency is obvious. A Canadian bank president recently protested that Canadian business men must not think of taking more orders for munitions from Russia and France unless they were paid cash. Canada, he said, already "owes too much" to be able to extend credit in this way. He pointed out that the United States' annual average credit against the other nations was half a billion dollars, and for the first year of the war would amount to three times that sum. The people of Canada, on the other hand, said he, after working hard all year, face a debit balance year after year. Said he: "Any import of unnecessary goods—goods that could be done without or that could have been made at home—is an unpatriotic act. Such importations are charged against the nation's credit. They usurp the place of legitimate borrowings for productive enterprises."

Canada's adverse balance of trade for the fiscal year just ended was a little more than twenty-six million dollars.* If she had been able to provide even two-thirds of her imports (for consumption) of animals, breadstuffs, fish, fruits, grease, hides and skins, provisions, seeds, soaps, vegetables and wool, as above referred to, she would have owed the world *nothing* for goods for that year. If she had been able to provide her-

self with all that she thus had to obtain abroad she would have had on the year's trading a favorable balance of over fifty-six million dollars! Then fifty-six million dollars' worth of Canadian raw material and other exports would have gone toward liquidating Canada's standing indebtedness abroad. By paying off debts it would have added obviously to our borrowing powers, or, in other words, the money thus earned would have been that much more available Canadian capital.

Factories are not built in a night, and our imports of manufactured goods, large as they are, have to some extent to be excused for the present. But imports of the products, direct and indirect, of agriculture are not to be regarded in the same manner. Imported food means not only increased debt to foreigners, but dearer food. Dearer food means dearer everything. It increases the cost of all production. It keeps workmen away. Yet strangely enough there has come in the past, and may be expected again in the future when wheat prices once more touch normal, a cry for "wider markets." It is a strange and a dangerous cry. The Canadian home market is the Canadian farmers' steady customer. It is less likely than foreign markets to show sudden fluctuations. The Canadian consumer—leaving aside for the moment the manufacturers who buy farm products to prepare them for export—is not suddenly cut off from the Canadian producer by foreign tariffs or embargoes, or by the conditions of foreign exchange, or over-production in Peru or Chili, or China or Penang, or the lack of ocean tonnage. Yet this *sure* market has to drag mutton and butter from the antipodes, eggs from Vermont, corn from Ohio and wool from Idaho—while the cry for "wider markets" echoes in its ears!

III.

If nations were as readily controlled as factories a shrewd general manager would observe the desirability of preserving a rough ratio between the volume of rural production and the volume of urban production. He might reason thus: "My rural production is really a part of my general raw material production. Although for the time being I may be compelled to sell chiefly rural products because I have not as yet been able to raise urban production to its proper position, nevertheless my ultimate aim is to sell urban products, for from that department of the national factory comes the most highly finished product, the product in which there is the highest possible element of labor-skill-and-art-value combined with the mere raw material. My raw material production, and especially the food production, must be designed to meet first the demand of the cities. When I have fed my cities I don't care how high the volume of food exports goes. But put first the food into the mouth of the workman so that he, transforming it into energy, may apply that energy to other raw material." The quick way for a nation to pay its foreign obligations and roll up a foreign credit lies, once the machinery of manufacture has been established, in selling *finished* articles. A sane national "management" would prefer to see the nation export flour than wheat, and bread than flour, and the fruits of labor rather than the units of energy contained in the bread. That is what men have called the theory of balanced production, balance between farm and industrial production. In practice this balance is not often attained. The United Kingdom's industrial activities far outbalance the food-and-raw-material producing side of the nation. This discrepancy explains the need for Free Trade in England: † the only things required from abroad are foodstuffs and raw materials which cannot possibly be supplied from within the nation. In the United States there is something nearly approaching a balance. But

* Balancing merchandise items only.

† Free Trade so-called.

Canada has only an anomalous position. Apparently, judging by total values of food production, Canada yields prodigious quantities of foodstuff. But the preponderating items in rural production for export are wheat, oats and barley, crops which, after a certain point has been reached, have little bearing upon the food-supply problem of the country. The surplus of Canadian agricultural products does not represent an actual surplus of food. Our surplusses of cereals are really offset by shortages in other lines of common food.

This is a key to part of the problem: The urban population of Canada increased, in the decade 1901-11, by 62.25 per cent.; the rural population, 17.16 per cent. Even this small gain in rural population is misleading, for in all but one of the chief mixed-farming provinces—and mixed-farming means general food production—Canada *lost* in rural population in that decade. The seeming gains were in the western wheat-growing areas. While Alberta gained 180,327 in rural population in the decade, British Columbia 100,318, Manitoba 70,511, and Saskatchewan 287,388; on the other hand Ontario lost 52,184, New Brunswick 1,493, Nova Scotia 23,981, and Prince Edward Island 9,546. Quebec alone, of the mixed-farming provinces, had rural gains to compensate for her urban gains. If, as a prominent Canadian agricultural authority says, the western wheat-grower is not to be counted as a food *producer*, but really as a consumer of common food,* and if, therefore, the entire gain in rural population in Manitoba, Saskatchewan and Alberta be reckoned as an addition to the food *consuming* population, then the total food consuming (and non-producing) population of Canada really increased from 2,021,799 in 1901 to 3,810,620 in 1911. The really effective food producing population increased in that time from 3,349,516 to 3,386,218, or just 36,702 farmers! This absurd increase in *real* farmers to make up the extra supplies needed for 1,796,821 consumers—and consumers whose standard of living has been going up in that decade, too†—explains many items in the high cost of living.

IV.

Wheat has played an important rôle in the drama of Canada's evolution. It is a question whether the part may not turn out to have a sinister end. It is possible that Canada may some day regard wheat as California, looking to-day at her all-but-sterile ex-wheat ranches, now regards that yellow crop. As a means of opening a country to agriculture, advertising its fertility, making early traffic for railways, and as a negotiable commodity for which, like gold, there is always a market of some sort, wheat has served a purpose and may continue to be of use to Canada for a long time to come. But it is a mistake for Canadians to suppose that wheat has been a profitable crop. The Easterner travelling in the West is shocked to learn, as he is bound to learn if he listens, that the wealthy men of the West made their money, not out of wheat, but by selling farm or city land at enhanced prices, or by *mixed* farming. If Canada relies now upon wheat as her great means of paying her debts abroad and securing further advances, then she should face the fact that according to official figures for 1910, 1911, 1912 and 1913, her wheat-growers earned only a hired man's wages plus a profit of eighty-seven cents per acre of wheat per year! This has undoubtedly meant cheaper food for foreign workmen, but it has meant sacrifice for Canadians. Possibly no other course was open at the time, but to rely upon wheat to make Canada rich means slow progress and a low standard of living. To engage our whole population in wheat-growing would be to hire ourselves as a nation at practically a farm laborer's wage. In the four years referred to the average return to the farmer in Canada on wheat was sixty-six cents per bushel. It cost thirty-five cents (average) to haul the bushel to Liverpool and pay the incidental expenses.‡ It costs \$12 per acre to prepare

the soil, sow, reap, thresh and team the grain from that acre to the elevator, allowing farm laborer's wages to the farmer only. The average yield per acre of wheat of all kinds in the years mentioned was 19.51 bushels.§ Thus 19.15 bushels at 66 cents yielded \$12.87—87 cents more than cost. No doubt some farmers made much more than that. But as much as they made *more* how many made less? If wheat prices were tending upward there might then be a gleam of comfort. But they do not tend upward, except for rare and short periods such as the one now prevailing, when exceptional circumstances have altered the ordinary conditions of the wheat markets of the world. Seventy-five per cent. of Russia's population is agricultural population on seemingly unlimited acres of excellent wheat land. The sons of Western farmers who may be helping to force open the Dardanelles are bringing closer the day of cheaper wheat for the world. The missionaries in India and the government authorities in Egypt—all are helping directly or indirectly to increase the world's wheat production. Chili is now able to send her wheat to Liverpool through the Panama Canal. The world total wheat production increased between 1906 and 1913 from 3,340,696,000 bushels to 3,957,813,000 bushels, or by a total of over 600,000,000 bushels. In other words, the world in seven years added to its wheat supply more than five times the total export of wheat from Canada in 1914! This merely goes to indicate that the general decline of wheat prices to be observed in British records since 1880-85 is likely to continue, and that from getting sixty-six cents a bushel on the average the Canadian farmer may come to even less. The reduction of transportation rates on wheat—a thing that may come through the increase of east and west traffic on Canadian railways and not chiefly by arbitrary rate reductions—may for a time keep up the price to the farmer. Access to the American market might for a time postpone the abandonment of wheat as the almost exclusive Western crop. But the inevitable tendency of the world is toward greater wheat production, and it seems not unfair to argue that the tendency of wheat prices is to go ultimately so far down that only the simplest of nations will look upon wheat growing as a great business.

While wheat prices have tended downward, what of other farm products? Is it not significant that farm board, for a man, is estimated to have risen from \$10 a month in 1909 to \$12.49 in 1910 and \$14.27 in 1914?¶ Does that not mean that with wheat profits going down farm costs have been going up? While the wheat market has been affected by all sorts of trade winds, the average price to the Canadian farmer in the market for eggs for export rose steadily from 12.1 cents per dozen in 1898 to 29 cents in 1914. The average price of milch cows in Canada rose from \$28.75 in 1901 to \$42.22 in 1911. The average value of the product of a milch cow in Canada rise in the same period from \$27.60 to \$39.38. The average price in Canada per head of cattle was in 1901, \$17.11, and in 1911, \$21.95. The average value per head of sheep rose in the same period from \$4.18 to \$4.92, and of the wool clip from 17.7 cents per pound to 23.1 cents per pound. The average value per head of horses in Canada was in 1901, \$74.98, and in 1911, \$146.95. How Canadian cheese shipments abroad have fallen off in order to meet growing home market demands, how we have lost the butter trade in England and now have to import over one million dollars' worth of butter per annum from New Zealand, is notorious. It might well be supposed that with so little profit on wheat, so much profit

* All Canada needs is 5½ bushels per head per annum of wheat.

† Average annual per capita consumption of eggs in 1901 was 68.8 dozen; in 1911, 84.6.

‡ Official estimate of the Saskatchewan Government. See Bulletin of Department of Agriculture.

§ Ottawa Census Bulletin, January, 1915.

¶ Ottawa Labor Department estimate.

and so great a demand for butter, cheese and cattle, there would have been more grain fed to cattle. It would seem obvious that to feed grain and sell dairy products or beef is the same as transforming a low-profit raw material into a high-profit finished product.

The annual wage and salary roll of Toronto—most of it spent ultimately on articles originating on the farm—increased in the twenty years between 1891 and 1911 from \$9,638,537 to \$36,064,815; that of Montreal from \$12,881,279 to \$34,270,853; Winnipeg from \$1,176,861 to \$7,614,646; Edmonton from nothing to \$1,007,724; Calgary from \$96,670 to \$1,569,589; Vancouver from \$564,630 to \$4,019,658; Regina from nothing to \$358,048; St. John from \$1,865,348 to \$2,269,898; and Sydney from \$114,624 to \$2,231,327.*

Yet in the second half of the same period the number of food-producers to meet this augmented buying-power increased not much more than 36,702!

V.

Caught between rising food costs at home and falling wheat prices abroad, the wheat producers of Canada turn against the railways, against the manufacturers and against the tariff. Here is where lies the sinister influence of wheat. The lack of a real National Policy of Production for Canada becomes manifest. The wheat miner, seeing no better national future than to grow wheat, would yield to the economic pressure of the highly efficient American nation to the south and have Canada become what she may only too easily become—a mere feeder of raw materials to American workmen. To correct the difficulties of wheat-growing the unwise wheat-grower would place in jeopardy the whole scheme of internal trade relations in Canada.

It would almost appear as though Canada had outgrown the national policy once so highly spoken of, and that she needs another. One is tempted to ask whether it would not be wise for men to consider carefully whether Canada is to be allowed merely to grow along the lines of the least resistance, shaping herself to the needs of the United States, or whether it is possible to conceive a career for a nation and organize the nation to that end. The easy path is lopsided agriculturalism, growing always what somebody else wants and never what is wanted at home. The difficult path is the path of combined agriculture and industry. The first is the course of inefficient nation: Such a nation cannot support the highest civilization. The second is the course of efficiency, not easy, calling for sacrifice, but the course by which the economic, social, political, intellectual and artistic life of the country may be made really national.

OUR COPPER INDUSTRY.

One of the metals most in demand for war purposes is copper, and the copper-producing regions of the United States and Canada are pulsating with renewed energy. The 50 per cent. increase in the price of copper since the war started, from 13 to 20 cents a pound, and the unlimited market, has meant the difference between a part-time and half-capacity production by the mining interests, and full utilization of all resources for output. Copper production is increasing on this continent at an abnormal rate.

It is very satisfactory that Canada is sharing in the benefits of the new market for copper. British Columbia is the only province in which copper mining and smelting is carried on in a large way, though Northern Ontario contains copper deposits of richness. At present all the smelting plants in

British Columbia, except the Tyee Copper Company's plant at Ladysmith, are operating. The British Columbia Copper Company has reopened its smelter at Greenwood, the Granby smelters at Grand Forks and Anyox, and the Consolidated plant at Trail are working with full steam. The copper furnaces of British Columbia are able to treat about 9,400 tons of ore a day and the quantity will be increased to 11,500 tons when the new Granby plant at Anyox is completed. This is equivalent to an annual production of about 100,000,000 pounds of copper. In addition, about 15,000,000 pounds of copper are produced from ores from the Britannia mine, and smelted at Tacoma. New mines are about to be opened at the property of the Quatsino Copper Company on Vancouver Island, and at the Princess camp of the Canada Copper Company.

Among the industrial projects that have engaged the attention of Dominion Government officials and the heads of Canadian metallurgical corporations is that of building a copper refinery in Canada. It is presumably the intention to locate this in British Columbia. Hitherto the refining of copper has been done in the United States, where the industry has reached great proportions, but the redoubled interest in our own rich ore deposits has led to the proposal that we bring Canadian copper ore to the refined state in Canada. That is a policy of true Canadian character, and would mean permanent improvement in our metal industry. Canada is busily engaged upon means to increase production. There is no more direct way of adding to our wealth than by taking out of the earth valuable ores and metals, and finishing the product in our own plants.—*Mail and Empire*.

CANADA'S FIRE WASTE.

The fire waste in Canada is the worst in the world. The losses in Canada would pay off the National Debt in 20 years. They are seven times as great, per capita, as they are in Great Britain, and we pay five times as much for our insurance as they pay in Europe. With a fire loss averaging over \$2,000,000 per month, or \$67,000 per day, the fire situation in Canada has reached the stage where some steps must be taken toward discovering the cause and evolving some means for a large reduction of this annual toll. Fire commissioners agree that a large proportion of fires are of deliberately incendiary origin, that a still larger percentage are unconsciously incendiary, and that a not inconsiderable number are the result of carelessness or neglect. The number of fires resulting from causes beyond human control constitutes almost a negligible quantity in the year's total. How this situation should be handled is a difficult question. The law prescribes punishment for arson, but under present conditions and with the machinery available, it is exceedingly difficult to secure convicting evidence. The insurance companies, being private corporations, cannot be expected to prosecute; unless the amount at issue is sufficiently large and the evidence is conclusive, it is cheaper for them to pay the loss than to contest it.

The police departments of our cities are not interested in fires unless it be shown that there are suspicious circumstances surrounding the occurrence. Even should this be demonstrated, there are no trained men connected with the police forces qualified to thoroughly investigate the circumstances. The Ontario Legislature, at its session in 1914, passed an Act to appoint a fire marshal, whose duty it would be to study the question of the annual fire loss. He would also have power to investigate fires which were deemed of suspicious nature and to prosecute where necessary. No further action has yet been taken under this legislation, and the appointment of a fire marshal is still in abeyance.

* Census of 1911.

TRANSPORTATION

By J. E. WALSH

RAILWAY LEGISLATION IN THE UNITED STATES.

The last issue contained a synopsis of the Cummins amendment to the Interstate Commerce Act. Particular attention was called to the fact that it places upon the carrier a liability for the full actual loss, damage or injury to the property transported which is carried by it, and it makes unlawful any limitation of that liability.

The Act provides, however, that if goods are hidden from view by wrapping, boxing or other means and the carrier is not notified as to the character thereof, the carrier may require shipper to specifically state in writing the value of the goods, and will not be liable beyond the amount so specifically stated.

Provision is being made in the freight classifications of the United States for the requirements of the Act.

The Interstate Commerce Commission has been called upon to interpret it as applied to almost every branch of transportation. With regard to the carriage of commodities and the declaration of the values thereof the Commission has held that the Act applies to a particular commodity only when the value of it cannot be known to the carrier from ordinary sources or reasonable inspection and to which rates based on declared value may be applied in connection with which the carrier's liability is limited to the value so declared; but that if the commodity has a definite market value or its value depends upon facts of which the carrier has equal knowledge with the shipper, the character of the commodity is known to the carrier, and the latter cannot stipulate any limitation of liability or the amount to be recovered in case of loss or damage.

It will thus be seen that obligations are placed upon shippers which make the value of legislation more or less questionable.

NEW YORK'S GLUT OF SHIPPING.

(*New York Commercial.*)

Never in the history of the shipping business has there been such feverish activity in the general scramble to get freight room at anywhere near a reasonable price, due to the fact that the war agents have been grabbing up every inch of steamer room available. On the other hand the steamship companies have been transferring to New York such ships as formerly touched only at Boston, Philadelphia, Baltimore or other Atlantic ports, besides adding to their fleet such sea going vessels of either small or large tonnage as they could charter.

It is a curious fact that while the number of vessels cleared from New York to foreign countries for the fiscal year ended June 30, 1915, were considerably larger than for the corresponding period the previous year, the total tonnage fell off considerably. This was due to the fact that many of the German ships of large tonnage were interned at New York and others had been sunk as a result of the war.

According to statistics available at the custom house the number of vessels which cleared from New York for foreign ports during July, 1914, was 387. This number dwindled to

275 in August, the first month of the war, and then gradually crept up to 373 last October. In April of this year 421 ships left for foreign ports, and in June the record was 444.

For the fiscal year ended June 30, 1915, the tonnage clearances to foreign countries amounted to 13,271,468, as against 16,541,482 the previous year. The tonnage of foreign vessels entering New York was 13,439,249, compared with 16,632,435 the previous year.

With all German merchant vessels interned, only a comparatively few of the French ships afloat, a number of the Italian merchant marine to be used for war purposes, and the withdrawal by England of about 1,500 merchant vessels for transports to France and the Dardanelles, it is no wonder that the freight rates at New York have jumped since normal times from 250 to 300 per cent. Shipping brokers claim, however, that there are quite enough vessels to take care of all outgoing freights, but that many of the shippers refuse to pay the rates asked.

Robert Henesy, an authority in regard to shipping conditions, said yesterday that New York was witnessing the heaviest business in evidence for many years. "In many instances it is almost impossible to place consignments going to European ports, owing to the fact that there is so much in the way of foreign government orders taking precedence. In many other lines rates are almost prohibitive owing to lack of freight room and competition, but any one paying the price can generally get their goods through in some way. The situation is so now that practically the owner of a tub and a paddle can make money."

It is estimated that the French line, which under ordinary circumstances ran about ten vessels from New York, now has about 140 making quick trips to France, many of them being boats from American ports which have been taken under charter. It is also pointed out that most of the goods thus transported are under the direct supervision of the French government, and that outside interests have little chance of getting any shipping room at present.

With the port of Archangel now open the Russian-American line now has about eight vessels running. The Holland-American line has about thirty every week, compared with normal sailings of about one every week, and the Scandinavian line has increased its sailings.

Several Italian lines have also increased their sailings. New lines which have recently been started are the Inter-ocean Transportation Company of America, which has put several of the former lake boats in service, and is making weekly sailings to London, Rotterdam, Havre, Copenhagen, Lisbon, Marseilles and Genoa.

In fact ships are arriving at New York which were never heard of before at this port, but amid all the dry facts of ammunition and dollars and cents, which seems to be the one aim of the modern seagoing man, there is an undercurrent made up of spies and counterspies, of dark deeds by day and night, for Uncle Sam must keep both eyes open in order that the United States shall remain neutral.

Another most important fact which is aiding the shipping conditions at New York is the large number of vessels which are now making the trip from San Francisco and other Pacific ports via the Panama Canal, successfully competing with the

railroads and the steamship lines from the gulf ports. The principal classes of freight carried are canned goods, dried fruits, beans, rice, nuts, hides, wood, metals and lumber.

The Pacific Steam Navigation and Royal Mail Steam Packet companies have announced that as soon as their steamers are released by the British Government from transport work, a fortnightly service will be started between New York and the west coast of South America via the Panama Canal. The fleet will consist of 15,000-ton steamers of the Orduna type, with accommodation for 1,000 passengers and a cargo capacity of 10,000 tons, owned by the Pacific Steam Navigation Company, which has maintained a regular service from Liverpool to the west coast via the straits of Magellan for seventy-five years.

According to figures made public at the custom house exports at New York for the week ended July 31 approached the high water mark, being put down at \$34,374,213, compared

with \$23,044,361 the previous week and \$14,177,223 during the corresponding week a year ago. The exports to date now total \$760,947,890, compared with \$520,539,333 during the corresponding period a year ago.

Shipments to England last week amounted to \$10,588,050, while France took war munitions and supplies of all kinds worth \$7,683,066. Russian purchases from New York were the largest in any single week since the beginning of the war, amounting to \$4,314,266. The former weekly average was about \$900,000.

There was also a considerable increase in the shipments to the Netherlands, totaling \$2,595,213. Italy bought goods to the amount of \$1,381,183, and the shipments to the British possessions were \$2,225,282. The shipments to the Argentine were also heavy, amounting to \$1,117,690, while Chile purchased goods valued at \$820,669. Panama exports showed a value of \$639,344.



Hudson Bay Fire Absorbed.

THE control of still another Canadian fire insurance company has passed into the hands of a large British concern. The Royal Insurance Company has obtained a controlling interest in the Hudson Bay Insurance Company of Vancouver. All the employees of the western company will be retained, and the only changes will be new appointments to the directorate.

Fire Loss in Canada.

The *Monetary Times*' estimate of Canada's fire loss during June amounted to \$1,107,506, compared with May loss of \$821,855 and \$1,267,416 for June of last year. This brings the fire loss of Canada for the first six months of 1915 up to \$7,243,796, a very favorable record as compared with previous years. The theory that times of financial stringency synchronize with heavy fire losses, would appear to be confuted by the present year's figures.

Aircraft Insurance in England.

The British Government have evolved a scheme of insurance against aircraft bombardment risks, the policies being issued by approved fire insurance companies and by the Government War Risks Insurance Office (Aircraft Department). Now that a public insurance scheme has been established, no liability can be accepted by the Government, and no claim can be entertained in respect of damage to property by aircraft or bombardment unless the property has been insured under the scheme. The rates of premium are not excessive, varying from 10c. per \$100.00 for dwellings and private warehouses to 37½c. per \$100.00 for merchandise and lumber in the open, in public warehouses and in transit.

Mississippi's Bad Record.

The report just issued by the Insurance Department shows that the fire companies in Mississippi last year received in nett premiums \$2,944,253 and paid out \$2,023,950—loss ratio of 76 per cent. Only two State companies are shown, one having a loss ratio in excess of 95 per cent. and the other reported in the hands of a receiver. Five companies withdrew during the year, and indications are that others will do

so during 1915, as losses are said to be even greater than in 1914. Altogether the outlook is very dark for fire insurance if reports of continued losses throughout the State can be relied on. The record in Mississippi for the past five years is over 68 per cent. for all companies.

An Illustration of Fire Waste.

The annual fire waste of the United States is illustrated by a model which the fire department built and which is now being shown at the Panama-Pacific Exposition. This model is nine feet long by four feet high, and represents a double line of buildings stretching from New York to Chicago across the States of New Jersey, Pennsylvania, Ohio and Indiana. In the model all these buildings are shown (by means of illuminated tinsel) to be on fire, and the conflagration is described as follows:—

The buildings consumed, if placed on lots of 65-foot frontage, would line both sides of a street extending from New York to Chicago. A person journeying along this street of desolation would pass in every 1,000 feet a ruin from which an injured person was taken. At every three-quarters of a mile in this journey he would encounter the charred remains of a human being who had been burned to death.

Severe Measures in Alabama.

Fire inspectors in Birmingham, Ala., have been notified that where hazardous fire conditions are found in the future the occupant or owner of the premises is to be placed under arrest. There has been an effort made during the past few months to induce citizens to give more attention to the matter of fire prevention, but the movement has met with utter disregard, notwithstanding many instances have been reported by the inspectors where the violations of fire risks have been of a flagrant nature. It is expected that the new rule will arouse the citizens to exercise more care and vigilance along fire prevention lines. The Birmingham fire record is bad enough to justify the most extreme measures.

Regina's Fire Inspection By-law.

A new fire inspection by-law is in operation in Regina, under which the fire department is required to inspect all business premises at least four times a year and all other

premises at least twice a year. Three sections of the by-law read as follows:—

BONFIRES, ETC.—No person shall kindle, maintain or assist in maintaining any bonfire or other exposed fire within the city unless he shall first have obtained a written permit from the chief, who shall give direction as to what measures are to be taken to safeguard property.

HANDLING OF RUBBISH.—No waste paper, excelsior, shavings, rubbish or other like inflammable material shall be left in any part of any business building for more than one day, except such material as may be stored within a fireproof room, provided with standard fire doors or within a fireproof receptacle, but all such material shall be destroyed, removed or placed within such fireproof receptacle at the close of each business day.

DISPOSITION OF HOT ASHES.—No hot ashes shall be deposited in any receptacle other than one of non-combustible material with fireproof cover, and no such ashes shall be deposited within fifteen feet of any wooden building or any wooden structure whatsoever.

Insurance Companies' Cash Income.

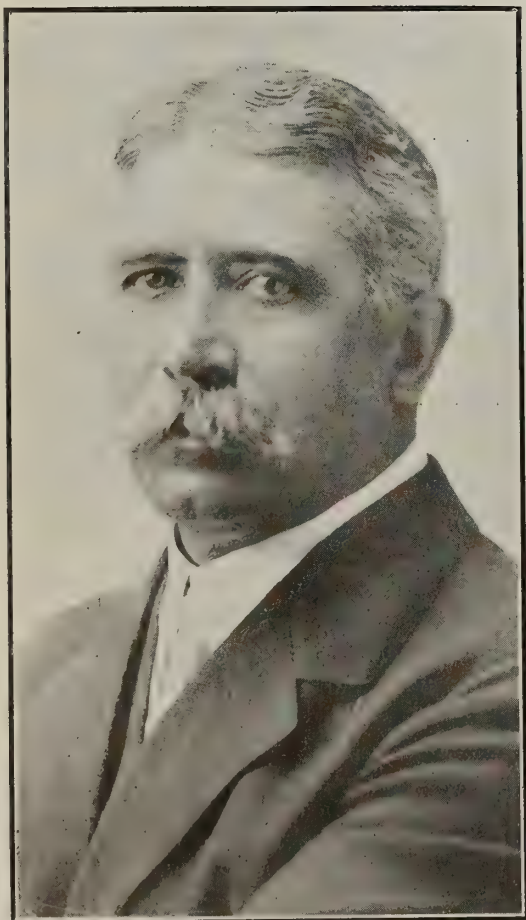
Replying to representations made to him by Mr. F. W. Rounswell, spokesman for representatives of insurance companies at Vancouver, protesting against a new rule just made by the federal government in respect of cash incomes, the Hon. W. J. Bowser, Attorney-General of British Columbia, wired the heads of the various provincial governments in an endeavor to enlist their co-operation against the proposal.

The difficulty arises from a letter from the Superintendent of Insurance at Ottawa stating that, in his opinion, it is necessary that the entire cash income of all companies operating under license be deposited with the chief agent of the company, and that all payments of losses shall be made from this account under the control of the chief agent.

It is alleged by the insurance agents who had lodged the protest that both from the standpoint of the insurance manager and that of the man who suffers loss by fire, the proposal to place the control of the companies' funds in the hands of men who are in the East will work great hardship, as all proofs of loss must be sent to the chief agent in Eastern Canada, where they will be passed upon by a manager who knows nothing at all about local conditions.

T A R I F F

By J. R. K. BRISTOL



HON. LIEUT.-COL. GEO. W. WATTS

Honorary Lieut.-Col. George W. Watts, Works Manager, Canadian General Electric Co., Limited, Toronto; Vice-President and Managing Director, Canadian Sunbeam Lamp Co., Limited, Toronto, who was elected Chairman of the Tariff

Committee at the annual meeting of the Canadian Manufacturers Association, has had an industrial experience which is equalled by few manufacturers in this country. Born in Devonshire, England, in 1862, he came to Canada in 1873 and was educated in Toronto public schools and Jarvis Collegiate Institute. He began his business career in the Accounting Department of H. J. Matthews & Brother, Toronto, and in 1888 took up civil engineering, and assisted in the construction of the Manitoba South-Western Colonization Railway and the Canadian Pacific Railway until 1885. Returning to Toronto, he became Purchasing Agent for the Toronto Construction and Electric Supply Co., Limited, and in 1892, when the Canadian General Electric Co., Limited, was organized, he was made Purchasing Agent and Works Manager. In 1911 he was elected Vice-President and Managing Director of the Canadian Sunbeam Lamp Co., Limited. He is a member of the Toronto Board of Trade, Tariff and Workmen's Compensation Committees of the Canadian Manufacturers Association, the Executive Committee of the Canadian Manufacturers Association, National Founders Association, and National Metal Trades Association. It is interesting to learn that Mr. Watts also served as a private in the Q. O. R. during the North-West Rebellion of 1885 and was wounded at the battle of Cut Knife Hill. He was gazetted Honorary Lieut.-Col. of the Q. O. R. in 1915.

CUSTOMS NOTICES.

Exports of Canadian Sheepskins to United States.

THE Commissioner of Customs has instructed collectors of customs on the above subject under date August 19th, Memo 1940-B, as follows:—

Referring to Memo 1916-B, you are advised that authority has been obtained for the issue of licenses to export Canadian sheepskins, woolled or not, to the United States. Collectors of customs may issue licenses permitting such exportation

upon applications being filed with them, accompanied by a satisfactory guarantee from the consignee in the United States and endorsed by the shipper or his agent.

JOHN MCDUGALD, Commissioner.

The guarantee should be in the following form:—

To the Minister of Customs,
Ottawa, Canada.

In consideration of your consenting to the exportation to us from Canada of Canadian sheepskins, the undersigned hereby give you the following undertaking, which shall remain in force so long as the present war continues:—

That the sheepskins so exported are to be used for manufacturing purposes only in the United States, and that no part of the wool or skins, or of the yarn or leather made therefrom, shall be re-exported from the United States of America.

Signature.....

Dated at.....

.....1915.

Endorsement by Exporter from Canada.

The terms and conditions of the within guarantee shall be faithfully carried out.

.....
Exporter (or Agent).

Hides.

On the 26th ult, the Department of Customs instructed collectors of customs that the prohibition on account of the Foot and Mouth Disease, against the importation into Canada of hides and other products, had been removed, effective from the first day of August, so far as concerns the States of Minnesota, North Dakota, South Dakota, Montana, Washington, Oregon, Idaho, Wyoming, Nebraska, Colorado, Utah, Nevada, California, Arizona, New Mexico, Oklahoma, and Texas—conditional on the shipment being accompanied by an affidavit of the owner or shipper that the shipment is the product of one of the above mentioned states, and has not been unloaded in any state other than one of the above mentioned states. The foregoing privilege was withdrawn, so far as the State of Minnesota is concerned, and except as to the special restrictions provided under the order-in-council of May 9, 1915, by instructions issued by the Department of Customs to collectors of customs on August 14, 1914.

Export of Magnetos.

On the 23rd ult. the Customs Department sent an instruction to collectors of customs authorizing the issuance of licenses for the exportation of magnetos to the United States to be repaired and returned to Canada.

War Measures, Prohibited Exports.

The list of prohibited exports enumerated in Customs Memoranda 1916-B and 1917-B has been extended by a further order dated August 16, 1915, Customs Memo. 1938-B.

The order provides that:—

(1) The exportation of all goods from Canada to Bulgaria is hereby prohibited.

(A) The exportation of the following goods is hereby prohibited to all destinations other than the United Kingdom, British Possessions and Protectorates, France, Italy, Russia (except Baltic ports), Japan, United States when for consumption in the United States only, or shipped to specified consignees in United Kingdom via United States, or exported via United States under license or dispensation from Canada, viz.:—

Raw cotton;

Phosphate rock, viz.: Apatites, and phosphate of lime.

(B) The exportation of the following goods is hereby prohibited to all destinations abroad other than the United Kingdom, British Possessions and Protectorates:—

Coal tar, crude;

Capsicum and oleo-resin or capsicum;

Chemicals, drugs, medicinal and pharmaceutical preparations, viz.:—

Caffeine and its salts;

Hydrochlone acid;

Magnesium chloride;

Oxides and salts of tungsten;

Oxides and salts of cobalt;

Oxalic acid;

Phosphorus;

Paraldehyde;

Theobromine—sodium salicylate;

Jute yarns, jute piece goods, and bags and sacks made of jute;

Manufactures of aluminum;

Mineral and vegetable wax;

Poppy seed;

Sunflower seed;

Tungsten filaments for electric lamps;

Wulfenite;

Bone ash;

Guano;

Phosphate of metals manufactured;

Phosphides;

Phosphoric acids and ocides;

Steel containing tungsten or molybdenum or both and any tools or other articles made from such steel.

(C) The exportation of the following goods is hereby prohibited to all foreign ports in Europe and on the Mediterranean and Black Seas, other than those of France, Russia (except Baltic ports), Belgium, Spain, Italy and Portugal:—

Arsenic and its compounds;

Cotton yarn and thread;

Gums, resins, balsams, and resinous substances of all kinds;

Hair, animal of all kinds;

Lignum vitae;

Metal working machinery;

Rattane;

Cassava powder and tapioca;

Mandioca or tapioca flour;

Molasses for feeding cattle;

Onions;

Potatoes;

Rice and rice flour;

Rye, rye flour and meal;

Sago and sago meal and flour;

Sunflower seed cake and meal.

(D) The export of the following articles is hereby prohibited to ports in Denmark, the Netherlands, Norway and Sweden:—

Terne plates;

Tin plates, including tin boxes and tin cannisters for food packing.

The provisions of this order-in-council shall be in force and take effect on and from the sixteenth day of August, 1915.

Australia.

The news press announce that Hon. Mr. Fisher, Minister of State for Trade and Customs, Australia, has stated that Australia is prepared to enter into the reciprocal tariff arrangement with Canada, and that negotiations between the two governments are progressing to that end.

Importation of Belgian Goods from Belgian Territory in Hostile Occupation.

A license may be obtained to import such goods conditional on proof being furnished of Belgian origin, and provided that payment be deferred until enemy occupation has ceased.

Departmental Rulings.

Stools for ingot moulds per blue print, being part of the ingot mould. Item 456.

Appraisers Bulletin No. 1156, dated July 30th, issued by the Department of Customs, Ottawa, instructs that "Steam towing winches are now manufactured in Canada by the Corbett Foundry & Machine Co., Ltd., of Owen Sound, Ontario, and are therefore not entitled to entry free of duty under Tariff Item 470.

Vitrolite or opalite glass plates ruled to be dutiable as plate glass under Items 320, 321, and 322. Vitrolite or opalite glass plates polished on one or more edges for use as tops of tables, counters or other furniture, Item 519, as parts of furniture.

Earthenware conduit lined with asbestos ruled dutiable under Item 288.

Newfoundland Tariff.

Metal lath ruled by the Newfoundland Customs to be dutiable under Item 85, the same as metal shingles and metal ceilings. The duty is 20 per cent. ad valorem, with a surtax of 10 per cent. of the duty.

Dumping Clause.

The Deputy Minister of Customs of Newfoundland writes that they have no dumping clause in the Newfoundland Tariff corresponding in any sense to that of the Tariff Act of Canada; and that the Newfoundland Customs Law requires that the regular duty and surtax be paid on the fair market value of the goods as sold for home consumption in the country of export.

France.

Notice is given by the British Government that information has been received from H. M. Ambassador at Paris to the effect that he has been informed by the French Government that all goods of the kinds prohibited to be exported and re-exported from France may, if destined for the United Kingdom, be transhipped in a French port and allowed to proceed freely to their destination without special authorization, provided that the goods were shipped on a through bill of lading to the United Kingdom.



By F. W. WEGENAST

SINCE the decision of the Privy Council in the case of the John Deere Plow Company v. Wharton, holding that a provincial license was not necessary to enable a Dominion company to carry on business in a province, and the decision of the Supreme Court in the case of the Bonanza Creek Gold Mining Co. v. The King, holding that a provincially incorporated company was inherently incapable of operating outside the boundaries of the incorporating province, there has been a large increase in the number of incorporations under the Companies Act of Canada. Commercial and manufacturing companies beginning business are taking their charters from the Dominion, and existing provincial companies are reorganizing under Dominion charters.

Old Forms of "Objects."

It is apparent from the notices of incorporation appearing regularly in the columns of the newspapers that one feature of the constitutional situation as regards companies has almost entirely escaped the notice of those taking out new Dominion charters. In the "objects" of the new companies, as published in the notices, there appear with monotonous regularity the old formulæ which have been employed both in provincial and Dominion charters heretofore. A common form of "objects clause" has been "to manufacture, buy, sell and deal in," etc. Another common clause was "to acquire by purchase or otherwise the business heretofore carried on under the name of," etc. The continued use of these forms, taken from the precedents in England where conditions are entirely different, gives no evidence that the constitutional situation under our federal system or the effect of the recent decisions have been duly taken into consideration.

The British North America Act gives to the provinces jurisdiction over "the incorporation of companies with pro-

vincial objects." It has been a subject of contention since Confederation whether the expression, "provincial objects" had reference to the territory within which the company was to operate or to the subject-matter of the company's operations. It was contended on the one hand that a company incorporated under provincial legislation was inherently incapable of performing its corporate functions outside the incorporating province; in other words, that there must be read into every provincial charter a limitation rendering the company incapable of carrying out its objects outside the geographical territory of the province. It was contended on the other hand that a provincially incorporated company, being endowed by the province with a corporate entity and powers, could assert its entity and its powers in any other jurisdiction which accorded them recognition. The decision in the Bonanza Creek Mining Case upholds the first of these two contentions, and if it is sustained by the Privy Council on appeal it will mean that provincially incorporated companies are, and always were, incapable of carrying on operations outside the incorporating province.

Some Dominion Charters Not Valid.

But it is one thing to say that a provincially incorporated company can operate only within the incorporating province; it is quite another thing to say that every company incorporated by the Dominion can operate anywhere throughout Canada without supplementary provincial authority. It cannot be doubted that the Dominion incorporating power is also subject to limitations. It seems clear that if the province cannot incorporate a company with objects other than "provincial," neither can the Dominion incorporate a company with objects that are provincial. It seems clear, for instance, that the Dominion could not incorporate a company "to

manufacture cheese and butter in the township of” It is quite possible in fact that “manufacturing” by itself, being a thing that must necessarily be carried on locally, would come under the head of “provincial objects.” Recently a charter was issued by the Dominion for a company to carry on the business of “florists and gardeners.” It requires something of a stretch of imagination to conceive of gardening as a thing to be carried on “throughout the Dominion of Canada and elsewhere,” although the charter in terms conferred such powers upon the company. Nor does it seem fair to assume that any set of objects no matter how local they may be in their essential character, can be brought within the jurisdiction of the Dominion by merely adding the words “the operations of the company to be carried on throughout the Dominion of Canada and elsewhere,” which is the common form of clause in Dominion charters. If this doubt is well founded there is grave danger that many of the charters which have been issued by the Dominion may be not merely defective in their enunciation of objects but actually invalid and void as dealing with subjects outside the jurisdiction of the Canadian Companies Act and the Dominion Parliament.

Powers of Dominion Over Trade and Commerce.

But whatever may be the correct view as to the validity of the charters of such companies, there is a further question as to their coming within the scope of the Privy Council's decision in the John Deere Plow Co. Case and thus escaping the provincial company licensing and registration Acts. The feature of the John Deere Plow Co. decision which seems generally to have escaped notice is the character of the “objects” in the Company's charter, which were “to carry on the business of dealers in agricultural implements, carriages, wagons and machinery, and a general agency, commission and mercantile business . . . the operations of the Company to be carried on throughout the Dominion of Canada and elsewhere.” Not only do these words present a picture of a company with operations of a broad general scope, but they suggest almost irresistibly an exercise of the jurisdiction of the Dominion over “trade and commerce.” In fact, one of the grounds of their Lordships' decision was that a trading company with objects such as those in question was subject, in the exercise of its powers, not to the provincial Legislatures, but to the Dominion Parliament. Would the same be held of a company “to carry on the business of florists and gardeners,” etc., or even “to manufacture, buy, sell and deal in goods, wares and merchandise”?

What Objects Within Dominion Jurisdiction?

The question is of the utmost importance, and yet it is impossible to resist the impression that the form of the charters now being issued is more largely determined by accident and habit than by an examination of the constitutional considerations involved. It may be years before the constitutional ground is clearly mapped out by decisions of the courts, though the appeal in the Companies' Reference ought to clear some of the ground. In the meantime it will be necessary to exercise some forethought and imagination as to the ultimate trend of the case law. And above all it is necessary to consider carefully the precedents that have been laid down. Mr. Justice Duff, of the Supreme Court of Canada, has in a number of judgments suggested that the criterion to be applied in deciding whether a particular set of objects fall within the provincial or the Dominion sphere is the general scope of the objects as they stand in the company's charter. A good deal of latitude would doubtless be given in the matter of “incidental” or “ancillary” powers. Thus a company “to carry on trade throughout Canada in . . .” could probably be incorporated by the Dominion with power incidentally to manufacture and to hold the land necessary for trading

purposes. But it is quite possible to conceive that the company incorporated for the purpose of holding land or for the purpose of carrying on the business of manufacturing might ultimately be held by the courts to be the kind of company that ought to receive its authorization at the hands of the provinces. There is no excuse in the meantime for incorporating companies under Dominion charters with objects of other than the broadest general scope in such form as to invoke the paramount jurisdiction of the Dominion over trade and commerce and the application of the principles laid down by the Privy Council in the John Deere Plow Co. case.

LUMBER INDUSTRY OF BRITISH COLUMBIA.

In a general review of the present position of the lumber industry of British Columbia, the Hon. the Minister of Lands mentions the connection established with the various departments of the Imperial Government, as a result of which orders for seven cargoes of lumber, totalling over 20,000,000 feet, and representing a disbursement of at least \$250,000 within the Province, have been secured.

The cut of logs for the months of May, June and July was as great as for the same period last year, a unique fact when it is remembered that few industries, other than those engaged in the output of munitions, have been able to maintain their production since the outbreak of war. As many camps are running now as there were at this time in 1914. Some 7,000,000 feet of logs, mostly low grade cedar and hemlock, are being exported every month, thus affording an outlet for the surplus cut of the camps and affording employment to many men who would otherwise be idle, incidentally benefiting the Treasury to the extent of over \$9,000 a month.

Last year the total lumber exports amounted to 41,000,000 feet, while, as already mentioned, the orders secured from the British Government in three months in themselves amount to one-half that quantity.

Lack of Tonnage.

The lack of tonnage is a serious problem, and but for it and the prevailing low prices for lumber the mills would be in far better position. During the three months, April, May and June, only two lumber-carrying vessels, small sailers, were chartered in British Columbia, as compared with ninety-eight taken on the American side. Of the 170 steam schooners in the Pacific Coast lumber-carrying trade, all are owned on the American side, many being the property of sawmill interests. In other words, the monopoly of that class of shipping is in American hands. The question of tonnage is being watched most carefully by the Provincial Government, and every effort is being made to secure further transportation for the lumber industry.

The foregoing concerns the coast mills, but Government action is being exerted on behalf of the interior sawmills, which, since the falling off in the prairie demand for lumber, have suffered a severe decline in output, 40 per cent. in the past four months, as compared with the corresponding period last year. In co-operation with the millmen, an energetic advertising campaign to increase the uses of wood is being pushed forward. The prairie agricultural departments and other bodies are endeavoring to advance better farming methods on the prairie, and better farming means more and improved farm buildings, with a resultant steady demand for British Columbia lumber. Many pamphlets giving information about barn, silo, and other farm construction, plan-books, a bureau of information, lectures—these are but a part of the general plan of the advertising campaign now in hand. That the result of this close co-operation between the Government and lumber industry will benefit business conditions there is no doubt.

HOW A CANADIAN MANUFACTURING CITY SAFEGUARDS ITS WORKMEN

THE factory owners in one of the leading manufacturing and mercantile cities in Western Ontario are taking an active interest in the physical well-being of the men in their employ, both for economic and humanitarian reasons.

Many of the factories have established emergency hospitals or branches of the St. John's Ambulance Association, or supplied kits for the treatment of wounds, and first aid to the injured, in case of accidents.

The local branch of St. John's Ambulance Association have closed their lectures for the season and awarded their diplomas. Every factory in the city was represented, and the factory owners send each term any of their employees to these classes.

The city furnishes a hall for the lectures, also requires the firemen and police officers to attend the lectures.

The local medical society furnish the lecturers and a nominal fee is charged for the season of lectures, which covers all expenses, and each member of the class is furnished with a First Aid to the Injured book and an Esmarch's triangular bandage.

The day when healthy men dress severe cuts in a factory with tobacco is past, and the factory owners in this city have found where first aid to the injured is applied by any one has attended the lectures of the St. John's Ambulance Association, have found that serious illness has been prevented and many minor ailments relieved and cured by having in the factory men who are able to render first aid by simple and inexpensive methods. In this way the time lost by employees from sickness has been greatly reduced.

The prompt attention to injuries generally results in a quick return of a workman to his former efficiency.

Slight physical defects, received often as the result of an accident which has not received prompt attention, detract from a man's ability to cope with his task or hamper his performance, so that in the long run he is much less efficient than his physically perfect neighbor.

Prompt skillful dressing of scratches, cuts and slight bruises reduces the total of "lay-offs," thus preventing



Pulmotor in Use

serious infection. At the same time the cause and nature of slight accidents are recorded.

It may be interesting to note that a first aid man is in attendance in all the factories and lumber yards in the city, who is selected from one of the employees.

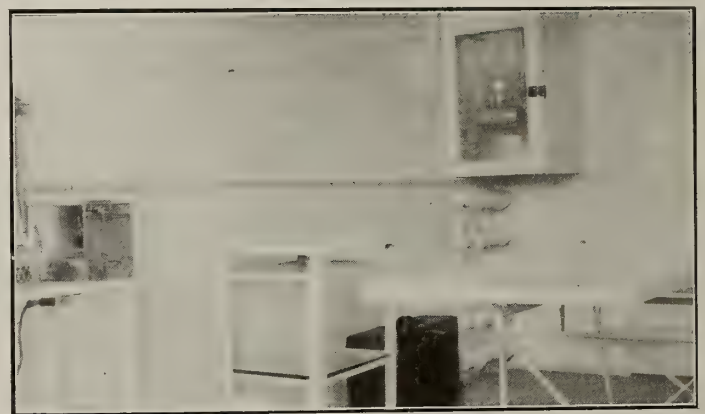
The bandages, tools, etc., are all kept in glass jars, so that

there is no chance of anything becoming contaminated, and under his personal supervision and care.

The St. John's Ambulance Association has now completed thirty years of its existence, and during that period hundreds of thousands of men and women have been taught at its classes in all parts of the world how to help their injured fellow-employees and neighbors.

First aid to the injured as taught in the manual is a special branch of surgery and practical medicine by a knowledge of which trained persons are enabled to afford skilled assistance in cases of accident and sudden illness.

The instruction begins and ends with first aid, and the subject is taught simply, but thoroughly and exhaustively.



Medical and Dressing Room

The duty of the ambulance pupil ends where the doctor's commences, and there is no overlapping or clashing of duty or interests.

Some of the factories have established a branch class of their own, with one of the advanced pupils at the head of it.

The mayor of the city takes an active interest in the local organization, and business men as well as factory managers give it their hearty support. Within the past year the benefits to be derived in a factory when an accident occurs of a serious nature, have been demonstrated, as there is always some one trained in the work who can apply the necessary first aid, no matter how serious the accident has been, where heretofore, when any serious accident occurred, it was all guess work in what best to do and aid to render.

The medicine or first aid cabinet is kept in a number of plants at the entrance or timekeeper's office, and is equipped with a stretcher which at all times, when not in use, will be found there. The contents of a first aid medicine box or cabinet consists of a set of splints, 12 triangular bandages, 12 roller bandages, 2¼ packets of cotton wool and boric lint, adhesive plaster, pair of scissors, knife, 2 oz. each of olive oil, eucalyptus, B. P. C., sal volatile and spirits, ether comp., safety pins, needles, thread and tape.

INCREASE IN THE COST OF DYES.

The Master Dyers' Association of the United States, through its President, Mr. D. F. Waters, is protesting that unscrupulous speculators have cornered the bulk of available color material in America and have advanced the prices to such an extent that in some cases dyers are paying 500 per cent. more than they were before the war.

TRADE OPPORTUNITIES IN RUSSIA

By C. F. JUST

Special Commissioner of the Canadian Government

THIS report of Special Commissioner C. F. Just, who is investigating Russian markets for the Canadian Government, contains so much information of interest to manufacturers that INDUSTRIAL CANADA republishes it herewith from the Weekly Bulletin, No. 604, Trade and Commerce Department, Ottawa:—

The requirements of the Petrograd district in imported articles cover a wide range of manufactures and of natural products. Many of these, probably, lie outside the ability of Canada to supply. For immediate purposes, however, the subjoined list in Appendix A covers roughly the classes of Canadian products in which there should be a reasonable expectation of securing trade.

Agricultural Machinery and Implements.

The relative importance of the Petrograd district for agricultural machinery and implements is less than in Central and Southern Russia. In the Baltic provinces, however, with Riga and Libau as ports of entry, and where intensive farming is widespread, the market is comparatively large. Here Germany has been in control, and as one of the results of the war, good opportunities should therefore exist for Canada in that district. Sickles and scythes are in almost general use in Northern Russia, where the greater part of the crops are harvested with these implements. The trade was, however, chiefly in Austrian hands prior to the war. American and English goods are also imported, the former retailing at 50 cents per sickle, while the England and Austrian varieties are cheaper. Specimen samples have been obtained and will be open for inspection when received at the Department.

Motor Cars and Lorries.

Motor cars have been sold in ever-increasing numbers in the past, despite the bad roads outside of the towns, which are not unlike the Canadian prairie trails. The replacing of worn-out and commandeered cars alone should represent a large trade. There is a good future also, it is understood, before the improved cheap car as runabout for general urban and rural intercommunications, e.g., for the use of managers and foremen, between town offices and outlying factories in industrial districts. A 20-h.p. car costing \$1,100 delivered will probably be the most serviceable and popular type. It is recognized that the greater expense of the upkeep is more than offset by the lower initial cost. It is essential to the success of such a car that spares be provided, in order that the owner can keep his car uninterruptedly on the road. An ideal car of the better type, and of 20 to 40-h.p. would be one to retail at \$2,250. A well-known German firm did a large business in this model. They were generally sold on two years' credit, with interest added at 8 per cent. The agent's commission for cars has been from 10 to 20 per cent., according to the class and general character of the car. It is said that arrangements are now being made to push a popular American cheap car with the assistance of the American agricultural machinery agents throughout Russia. Motor lorries in Petrograd and other centres are coming much into favor. A lower set and more compact type of car is, however, required than the German kind now in use, in order to secure better loading and unloading facilities. Price should range from \$2,800 to \$3,500 delivered.

Railway Stock and Locomotives.

Nominally the importation of all material for the construction and operation of railways is prohibited. Purchases outside Russia must be authorized by an order of the Administration. The present relaxation of the general rule, however, is rendered imperative owing to the shortage of rolling stock, e.g., steel rails and fastenings, which the Russian car shops are unable to supply. One authority puts the requirements of the private and state railways from 1913 to 1917 inclusive, at a minimum of at least 145,000 wagons and trucks. This is quite beyond the capacity of the native works. The belief is that the future will witness some modifications in favor of allied countries contracting for such materials. Petrograd is the only place where business matters of this character can be transacted, whether for private or state lines.

Boilers, Oil Motors, Gasoline Engines, Lifts.

For boilers of special types there is probably a market. The Russian competition in other kinds, however, monopolizes the demand. The openings in oil motors and gasoline engines in the north have hitherto been the subject of keen competition between the German, French and Swedish firms, Germany securing the greater part of the business. In lifts (elevators), for business and apartment blocks, the United States and Germany have been to the fore.

Machinery.

For Canadian specialties in machinery for saw mills, flour mills and wood-cutting there are undeniable openings. Nothing but the highest class of machinery can hope for success. The personal presence on the spot of responsible experts of the firms concerned is equally essential. Demonstration is also to be thought of, as it is useless to expect to sell machinery of this class from an illustrated catalogue. Price is not the determining factor so much as the possession of the suitable article, and especially of facilities to meet the local customs. The business is fairly concentrated in Petrograd, where the purchasing commission houses for the dealers and users in the interior have their headquarters, as well as the contractors, great industrial concerns and mining corporations, to say nothing of the Government spending department, which are the largest customers in most lines in Russia. Negotiations can, therefore, be most conveniently carried out and the settlements effected in Petrograd. In saw mills and wood-working machines Sweden has been the provider next in importance to Germany. In flour mill equipment, Germany, Great Britain and Sweden. In mining machinery, Great Britain. It is stated that the change now proceeding in the character of the mining in the Urals, i.e., from surface workings to deep mining, is necessitating the employment of totally new classes of machinery. Certain Canadian specialties like rock drills, etc., in this regard, therefore, should now have an opportunity. The great Russian corporations, like the Demidoff Heirs, the Shouvaloff, and the many foreign-owned mining companies are controlled from Petrograd.

Grain Elevator Equipment and Appliances.

In this connection the policy of the Russian Government actively to assist in promoting both the interest of the grain trade and of the peasantry by the construction of terminal country elevators should be of practical interest to Canadians.

A series of 110 elevators, large and small, have been planned for South-East Russia alone. Contracts have been let, and others are pending. The details of the equipment can be seen in a museum which has been opened in Petrograd by the State Bank making the advances, where working models and the various appliances can be studied and inspected. Canadian manufacturers of elevator equipment would probably require to familiarize themselves with the suggestion of an assembling shop or auxiliary works, which has already been outlined in Weekly Bulletin, No. 596, in order to participate in contracts. In fact, the more the question of the import of machines and machinery from Canada into Russia is studied, the more does the necessity of some such procedure become apparent.

Electric Power Lighting.

The practical monopoly of Germany in the electric lighting industry in the past suggests openings for Canadian and British interests in the future. Canadian enterprise in other countries has attracted Russian attention, and questions have been repeatedly asked as to the possibility of Canada's intervention in a number of electrical power and traction schemes which are more than overdue, not only for Petrograd, but also for other important centres of European Russia.

Chemicals.

Owing to the gradual development of Russian manufacturing industries, the import in heavy chemicals is more or less limited to the crude and more elementary products. The value of chemicals annually produced in Russia is estimated at 150,000,000 roubles. A large producing industry, particularly in the central Volga district, provides the materials required for the manufacture of the more essential bulk chemicals, such as sulphuric acid, soda and caustic soda. Three-fifths of the Russian imports of chemicals previous to the war came from Germany. Among the most important are glauber and strassfurt salt, sulphur, cream of tartar, heavy spar sulphur compounds of sodium, citric acid, salt and quinine. For the suggested list of Canada's chemicals the demand is certainly large in the Petrograd district.

In regard to carbide of calcium, it is at present rather difficult to say whether the arrangements of the combine of producers of this article would permit its exportation to Russia from Canada. There is, however, a large demand for it. Coal tar products and pitch, carbolic acid, creosote, and even sulphate of ammonia are wanted, the last-named more in the north district than elsewhere. Probably shipping facilities would determine the possibility of competition of our productions from Nova Scotia. But it may be pointed out that the East Asiatic Steamship Company, and the Russian-American Company call at Halifax.

In case our Cape Breton iron works produce boric slag, that article finds a large sale in the Baltic provinces as a fertilizer.

Drugs.

In practically all drugs and medicinal preparations of the European pharmacopeia Russia depends on outside supplies. Nearly 90 per cent., according to the London Chamber of Commerce, come from Germany. The articles given in Appendix "B" find a ready sale and have been imported hitherto entirely from Germany.

The making up of prescriptions and the compounding of drugs is in the hands of apothecaries, who must be distinguished from chemists, and whose prices, though fixed by the Administration, are high. Chemists are more numerous than apothecaries. Chemists trade in simple drugs, patent medicines, cosmetics, etc. The sale of patent

medicines is largely on the increase, partly owing to the greater cost of medicine made from doctors' prescriptions and partly through energetic advertising. One of the most valuable patent medicines known to Canada and Great Britain for a quarter of a century, and which is of Canadian origin, was not, however, introduced into Russia until recently. All such preparations have to be approved by the Pharmaceutical Board of the Department of the Interior before they can be publicly offered for sale.

Tanning Materials.

There are very important openings for tanning materials. The chief supply has, as usual, been handled by Germany. Canadian hemlock, birch bark and chestnut extracts should do well. Oak bark, valonia, galls and other substances in use can also be confidently disposed of. Russian tanneries producing leather footwear require mainly decolorized extracts for a speedy process of tanning, which enables them to turn out a cheap leather. Hemlock extract in this connection is said to be not suitable.

Miscellaneous Manufactures.

Leather.—A reference to the statistics, published in Weekly Bulletin, No. 602, supplied in the Russian report, shows how important the Russian market is for leather of almost every class, with the exception, in normal times, of cow leather for making the rough peasant boots. At present, and probably for a considerable time to come, even this latter kind will find a ready sale at good prices. Under ordinary circumstances, Russian boot and shoe factories are permanently in the market for leather for uppers. The chief demand is for box calf and chrome, in different qualities, patent leather, glaze kid, and now also for vegetable-tanned sole leather. American "cheorean" is also popular. Canadian leather manufacturers can probably build up a steady and satisfactory trade if they copy Continental and American firms in supplying standardized selections as regards the quality and material and in supplying, moreover, the market with trimmed and attractive-looking skins. Calf skins have been imported from Germany valuing \$4,000,000 in one year, and in 1913 the price of the German article, including duty, was 28 cents per square foot, a credit of 60 days being allowed to regular customers. Slides for carriages, furniture, valises, cases and portmanteaus are always wanted.

Boots and Shoes.—The imports of boots and shoes are substantial, and as they are mainly derived from Austria (ladies) and from Germany, the desirability of alternative sources of supply in the future is obvious. American footwear of the better class had already been successfully introduced before the war, by the characteristic method of special shops. These imported goods are generally the expensive, fashionable kind, and find a sale among customers to whom price is not a serious consideration. The Russian town-dweller of the female sex is usually very neatly shod, and a stylish, well-made boot or shoe, despite a high cost, is growing in request. The cheaper goods are produced in Russia, and Petrograd has easily the largest boot and shoe factories in the country. The general inclemency of the climate makes a good article acceptable, and the opinion was expressed that the American shoe had not only come to stay, but would gradually become an important trade in the aggregate, although it was an article for the well-to-do persons rather than for the masses. The Russian practice of wearing rubbers for never less than eight months in the year calls for light footwear. Samples of the Warsaw and Vienna makes of the best qualities of shoes retailing at 10.50 roubles, and of boots from 14 to 15 roubles per pair have been obtained for the information of Canadian manufacturers. These prices are but slightly over those of peace

times. Competing with the American shoe is notably the German "Standard" make, selling at \$7.20 per pair. American lasts are somewhat in vogue.

Articles of Consumption.

Fresh Apples.—The production of alimentary products in Russia is so vast and varied that there is little which Canada can additionally offer. For the local trade of Petrograd, apples of the finest quality form an interesting exception. Hitherto these, as indeed all other foreign fruit, reached Russia via Hamburg, and were bought at the fruit auctions by the buyers of the Russian fruit importers stationed there. It is stated that Germany gets annually a commission on a total of nearly 40,000,000 of roubles' worth of fruit destined for Russia. It would seem time that this was changed. Boxed apples are the only kind which are wanted by the Petrograd trade, and of these some 150,000 cases are taken from the United States, Canada and Australia annually. The dealers are anxious to get into direct touch with Canadian growers. Canned "gallon" apples was also considered an article that should find a market, as well as evaporated apples. Of canned fish, there is already probably enough and to spare, but one of the largest provision dealers in Petrograd in pink salmon has become interested in the Canadian products. It is believed also that this article might be made a popular alternative to the canned variety of sardine, which is consumed in great quantities in Petrograd, and there are further possibilities for this article in connection with military contracts.

A Canadian Forwarding Agency for Russian Trade.

British trade with Russia has undoubtedly suffered both materially and in prestige from the fact that the whole of the foreign forwarding business of Russia has been allowed to drift into foreign hands, mainly German, who have practically controlled the position. It has been attended with disagreeable surprises since the war began. Any development of Canadian trade with Russia should be free from such influences, and should be in Canadian hands. It is believed that in the Canadian forwarding agencies lies the instrument for this purpose. A fusion of these interests in Russia for Canadian purposes must be a *sine qua non*, if successful results are to be reached. And if with the usual forwarding business there could be continued banking facilities with the joint support of the twenty-seven Canadian chartered banks, up to a modest limit, the means for financing a respectable volume of trade in the aggregate with Russia, on the lines of the extended credit, which that market calls for, could be automatically provided. In this way one of the greatest difficulties in the path of promoting trade with Russia would probably be solved. There is reason to believe that an inexpensive organization at three or four selected points in Russia could be built up on these lines without delay, with the co-operation of existing trustworthy British elements possessing long local experience.

Moscow and Central Russia.

Central Russia, with Moscow, the ancient capital of the Czar, as its focal point, is at once the richest and most thickly populated part (93.73 to the square mile) of the Empire. This region contains eighteen governments, covering an area of 480,000 square miles, less than one-half of the Petrograd district, but with more than twice the population, viz., 45,000,000. It is, roughly, two-fifths of the total area of European Russia, and stretches from Minsk in the west to the frontiers of Siberia and of Central Asia, a distance of 1,500 miles. A closer idea may be obtained if Central Russia is compared to an area equal to Germany, France, Switzerland, Belgium, Holland and Denmark, and a population equal to that of the United Kingdom. As may

be expected, the large towns are both larger and more numerous than elsewhere in Russia. Moscow had, in 1912, a population of 1,617,000, and there were also at least ten cities with populations ranging from 40,000 to 80,000; ten of from 100,000 to 170,000, and one each of 190,000 and of 225,000 inhabitants. Railway communications are, for Russia, relatively well developed here and to the south, but, compared with Canada, the mileage is relatively small. In 1914 Russia had 32½ miles of railway per 100,000 inhabitants, or one mile for every 3,125 of the population, against Canada's one mile for every 200 of her inhabitants. Russia, however, is beginning to realize the economic significance of railway expansion, and from other points of view the lessons of the present war may be expected to accelerate railway development.

Moscow as a Business Centre.

As a place of business Moscow occupies a unique position. The interests located there control and serve the enormous area of which the city forms literally the geographical centre in all matters of supply and demand for a mainly agricultural country, and it is through the Moscow merchants and agency houses that foreign imports are brought most directly before the consumers. With characteristic enterprise the Moscow merchants have also organized, and may be said to control the Siberian trade. Many of the most successful of her citizens are Siberian-born, who find it desirable to reside in Moscow to direct the financing and the purchasing end of their business operations. Finally, industrial Russia may be said to centre in this city, where the Moscow Manufacturers' Association alone forms almost a party in the State and exercises a potent influence on the tariff policy of the country. They are responsible for the Russian textile industries, which centre mainly here, the iron and steel industry, and many other manufactures, which are financed with local capital. It was Moscow's initiative also that started cotton-growing in the Caucasus and Central Asia, which now supplies a considerable portion of the raw material of the country's cotton trade. The air of business which pervades this strange but fascinating city is attractive to a Westerner. Business men are more accessible than elsewhere. They seem to have a grip of affairs and they pursue definite methods in their dealings, which lead to quick decision and execution. These qualities, coupled with a strong local patriotism and self-confidence, form the driving power of Moscow's citizens, which cannot fail to secure for the city an ever-increasing influence in the political and economic development of Russia.

German Influence in Moscow.

The dissimilarity of the Petrograd and Moscow markets has already been pointed out. Broadly, Petrograd disposes of a higher class of article at corresponding prices. Moscow's clients belong to the peasant class, to the inhabitants of the rural towns, whose wants are restricted, if not primitive, and who are in the stage when new wants and habits are forming. This does not necessarily lessen the range and variety of the articles desired, but rather the contrary. The attractiveness of the articles, however, rather than the quality, appeals, and cheapness is an all-determining factor. This attitude has been cleverly grasped and exploited by the German trader, and in this connection, nowhere as in Moscow is the evidence of the German adaptability, and of their German trade "penetration" of Russia more apparent. Moscow's stores were, and are still, full of German goods. Large numbers of these stores are obviously German, while the representatives of German houses in the district must be numbered by thousands. Many of the more important of

them are, for the moment, eager to take up British and other agencies, but probably only to side-track them at the first opportunity, when the war is over, and the return of the German becomes possible. In Moscow's best departmental store, the largest in Russia, which was founded by Scotsmen in the forties of last century, and is still conducted under British management, probably 60 per cent. of the foreign goods on sale have been of German manufacture. The range of retail prices paid and the quality which satisfies even the good class in Moscow precludes the nearest corresponding English goods from competing. This establishment was visited with one of the directors, and a number of samples were secured, which it is hoped may be of value to Canadian manufacturers. The firm is open to buy Canadian boots and shoes, brush goods, wringers and washing machines, law mowers, handles, tools, moulded glassware, enamelled ironware, kitchen utensils of wood, kitchen ranges, gas cooking stoves for flats, hand bags, grip frames and fittings, nicked bath fittings, office requisites and filing cabinets, cornice poles and plates, curtain rods, electrical fittings and lamps, novelties, soda fountains and freezing machines, certain canned vegetables, canned "gallon" apples and evaporated apples. Prices should be quoted c.i.f. London or Liverpool.

On the general question of the openings for Canada in the Moscow district, the substance of two typical interviews will doubtless be suggestive. The first of these was with the manager of one of the oldest British trading houses in Russia; the second with a highly respected Canadian gentleman who for years has been in charge of important Canadian machinery interests in Russia.

The former said that, generally speaking, Russian trade might be summed up in a word, "giving facilities." It was not necessarily a cut trade. The Russian had his peculiarities, and these had to be met. He was too indolent mentally to work out things himself, and would rather say: "I will pay you so much for an article if you will deliver it to my door."

The question of finance was, of course, difficult, but what was being stated as to the length of credits necessary was much exaggerated, or, at all events, exceptional, unless perhaps for certain classes of agricultural machinery. As long as the right agent was provided he would select the right customer for business on satisfactory terms—allowing, however, always for the market. Taking a list of articles, his observations were, briefly, as follows:—

Provisions.—The Moscow district was self-supporting, and anything Canadian that might be imported would never be for the masses, but for the few thousands of the better classes—it would be a luxury.

Chemicals.—Anything of this kind would be marketable if the prices of the Canadian articles could meet competition. Chemicals were wanted, and the competition of Germany could not be in future what it had been in the past.

Metals.—The same remarks apply here.

Leather.—All kinds would probably find a ready market. Leather belting and balata belting were also probable articles of import.

Boots and Shoes.—For the townspeople, the quality in demand is lighter in make than the English, and even lighter possibly than the American. Rubbers are worn here for eight or nine months in the year. Stock should be carried here or England.

Hardware.—There is a market for all kinds of hardware, but stock must be carried.

Pulleys (Split).—Moscow provides a market for this commodity.

Organs and Pianos.—No opening at present is in evidence.

Asbestos Goods.—A market is present.

News and Printing Paper.—There is probably a better market in South Russia, say, in Odessa, in competition with Finland, which could not possibly supply the total requirements. The quality of the paper used here requires improving, and a good line once introduced and approved would be difficult to oust. People read more; education is spreading. The natural increase of the population, moreover, is a market in itself. The consumption of paper increases 30 per cent. annually. The same remarks apply to wrapping and packing paper. Writing paper also of an improved character is much needed.

Typewriters.—A good machine, but cheaper than the standard makes, is likely to do well. Probably one retailing at the price of the "Empire" should have good prospects.

Radiators.—Although radiators are now coming from Sweden and Denmark, there is a market for Canadian radiators.

Tools and Axes.—The Russian single-handed axe—not the Canadian variety—is used for all purposes. Sickles and scythes have hitherto come from Austria.

Enamelled Ware.—Must be light. This should be a large article for popular use, suitable for the cooking stoves used, and wood firing.

Agricultural Machinery.—This is capable of indefinite extension, the light type of machinery supplied by the States and Canada is what is required. Motor ploughs are new, but promising, particularly in the South-East and in Siberia.

The firm in question handles as exports sugar and molasses, fusel oil, refuse from vodka distilleries for commercial uses, spirits, potatoes, flour, dextrine, hemp and flax, bristles, carpet, wools.

The Canadian gentleman, above referred to, considered the list of articles a useful one for Russian needs, provided Canada could produce them for export. Hitherto Canadians have not aspired to do this, but had been content with the local market, except in a very few lines, like agricultural machinery, etc. There was no question but that the Russian market was a large one potentially. The difficulties in Russia in regard to the recovery of debts were great, and required to be remedied, and the transfer of a business to another person, a course resorted to by unscrupulous customers, practically fraudulent, was a real danger. Canadians must go to work, however, in a special way just as the Germans have done, for if they did so, they would probably achieve similar results. The principle of firms combining in groups or syndicates in order to work the Russian market was a good one, but those who wanted to make a success must come over and investigate for themselves. Doing business direct from Canada was of little avail. In any case catalogues in Russian, and in the weights and measures and currency of the country were indispensable. The English threshers, as against American and Canadian, were so far the best for Russian conditions. Portable engines were wanted, and a prominent Canadian firm was attempting something in this line and in threshers the results of which effort had yet to be seen and gauged. Scythes and sickles, mainly Austrian, were important articles for Northern Russia, where the greater part of the crops were reaped with them. Canadian boots and shoes should sell well for town wear. Prices are about double the Canadian retail prices—a \$4 article selling for 15 roubles and a \$5 for 20 roubles. News and printing paper should be able to compete in South Russia with the Finnish product. If Canada could turn out the Russian kind of door furniture, handles and locks, and other similar articles, this might be a substantial business. Canadian nuts and hinges should also sell. For metal laths and for steel ceiling plates there should be a future, but this trade would require to be

pushed with intelligence and persistence. These materials had been employed with effect in a Samara house and had given full satisfaction. The enamelled ware in use was all German and Austrian, of good quality. The Canadian must be equally good in order to obtain a sale. The same competition would not now have to be faced.

It is the opinion of this gentleman, as well as the opinion of many others, that the Russian will resume business with German firms, if the same conditions are offered as previous to the war. The mass of the people do not appreciate the difference between a German and other foreigners. The Russian country merchant is influenced by price, and buys from the man who, on the whole, is cheaper. The tariff is not likely to be modified, but the reduction of duty is not of so much consequence to Canada as an advantage over German competition. It is to be feared that the purchasing power of the nation will be reduced after the war. Trade credits have, he thinks, been exaggerated. With the best and most reliable people, who must be sought out, a reasonable length of credit can generally be arranged. At present cash payments are very general, and this will not be without its effect when general business is resumed.

Russian Market for Agricultural Machinery.

The use of agricultural machinery and implements in the Moscow district continues to grow at an increasing rate. This feature is common to European and Asiatic Russia. It has been promoted and stimulated by every sort of Government encouragement, educational and financial, while the county councils, the Zemstvos and co-operative associations have also done their share. A progressive increase may, therefore, be looked for. The manufacture of agricultural machines and implements is, as it should be, the greatest single manufacturing industry of Russia, and the local works turn out successfully almost every modern implement and machine now on the market. But notwithstanding the constant multiplication of the works, the industry is quite unable to keep pace with the constantly-growing demand.

Imports of Agricultural Machinery.

The imports of agricultural machinery have steadily risen for years, and for the last three years were of the average value of 50,000,000 roubles annually. They were less than 20,000,000 roubles in 1905. In fact, the imports are a little less than the total value of the home production of agricultural implements and machines. That the character of these imports is changing can be traced at the same time in the falling off of the total weight of these imports, coupled with higher values. This falling off shows conclusively that the market in Russia is becoming increasingly one for the highest types of foreign agricultural machinery, and may be taken as a guarantee of the stability of the trade.

Moscow is the leading centre for the agricultural machinery trade, and the leading American and Canadian manufacturers have their headquarters here.

Flour Mill Machinery.

Of late a large demand has arisen for flour milling machinery, of the best types, for the numerous mills that are springing up, especially in Siberia, and as Russian works are only able to turn out the stone mills, the trade is worth cultivating. Hitherto Germany and Switzerland sent machinery of the roller process class, and did the bulk of the business, Great Britain, however, sharing to some extent.

The American Competition.

The American combine for harvesting machinery, known as the International Harvester Company, have opened huge works in the neighborhood of the city, which, for the arrangement of shops, the equipment, and the methods of manufacture, are quite remarkable. When in full working order, probably in three or four years' time, the output, it is estimated, will take care of one-sixth of Russian annual requirements in harvesting machines. Backed by enormous capital, the company is able to adopt methods of business which, it is thought, may prove a serious competition both to the older native works and also to foreign importers from the United Kingdom and Canada. The company became entitled to the Government bonus of one rouble per pood (36 pounds) in complicated agricultural machinery made in Russia, which bonus came into force in 1913, and it is estimated that the bonus earned in 1914 must have been about 1,000,000 roubles (\$500,000). This sum at, say, 30 roubles per machine, represents an output of 35,000 harvesters alone.

The position of the works, from the point of view of the cost of auxiliary material, coal, iron, etc., is not as good as might be desired, but there are compensations in the supply of labor and shipping facilities. The company is allowed to import from various American works concerned the more essential parts of these machines, and the works in this way are to a considerable extent assembling works.

Canadian Auxiliary Works.

In view of the possibilities for Canadian agricultural and other machinery in the Russian market, and in view also of safeguarding the existing trade, it seems that the establishment of some sort of auxiliary or assembling works in Russia is a subject worthy of the attention of Canadian machinery interests and their financial associates. It has been ascertained that the Russian Government is seriously considering ways and means for encouraging the setting up of additional works of the type of the International Harvester Company referred to, and any undertaking of this kind from Canada would doubtless receive such liberal treatment as to make the investment a satisfactory proposition.

Furs.

Moscow is the chief fur centre for Russia, and there is a tendency towards a gradual transfer of the business of subsidiary fur markets, like the Irbit and the Nijni Novgorod Fairs, to Moscow. Canadian fur dealers will probably be interested to learn of the movement, which has been initiated by the fur section of the Moscow Chamber of Commerce and Industry, to render the Russian fur industry in future independent of the Leipzig market, reference to which was made in Weekly Bulletin, No. 602. Leipzig has hitherto taken largely the Russian raw furs; has treated and finished them, and resold the finished product again to Moscow. In future Moscow purposes to do more of the finishing process herself, and is endeavoring also to get into touch with London, New York and other important fur-producing and fur importing centres for the purpose of direct business dealings. The president of this section desires it to be known that his committee will be glad to hear from Canadian fur interests, and will gladly furnish information that may prove of material interest and tend to forward the objects which the Chamber has in view. Moscow can supply finished furs, such as squirrel, squirrel tails, ermine, marten, stone and baum marten, hares, Persian lamb, etc. Russia, as is well known, is a very large buyer of fur goods.

The Assistance of Intermediary Firms.

The banks are greatly interested in the determination of Canada to enter the Russian market. The directors were unanimously of the opinion that the grouping of suitable Canadian firms wishing to trade in Russia was a course best adapted to success. They were equally agreed that such undertakings would prove in the good intermediary houses here the most effective instrument for pushing business throughout Central Russia. On the whole, this method was to be preferred to intermittent efforts to get into touch with the big firms, which might buy once in a while but which would be more likely to buy regularly if the selling firms interested were in the hands of regular agency houses. These intermediary firms are quite characteristic of Moscow trade; they facilitate business and are able to adjust differences and overcome difficulties with customers to a degree of which their principals have little conception. The banks promise every assistance in suggesting suitable houses and in giving helpful advice whenever needed. A certain number of firms of this character have been collected at the various centres visited.

Chambers of Commerce.

That Russian business circles are feeling their way towards a closer relation with allied countries is shown by the formation of various organizations, such as the Russo-British, the Russo-Italian and the Russo-French Chambers of Commerce. These have been followed by the formation in June of a Russo-American Chamber in Moscow under influential auspices. On this occasion, it is understood, steps were also taken that will ensure the creation of a strong Russo-American banking institution. Russian economists and commercial circles instinctively feel that in the United States may be found that support of which they stand so much in need, and which must be forthcoming if the development of the country is not to be seriously arrested. The position of Germany, whatever the result of the war, will probably never be the same again in Russia, owing to (1) her economic exhaustion, (2) her inability to rely upon the foreign money markets to finance her foreign trade on the old system; and (3) the burdens of heavy taxation will impair her power of competition. With so much of the wealth of the civilized world flowing into the United States as a consequence of the war that country is in a position to give this support, and seems marked out to fill in a part of the void caused by Germany's eclipse. Moreover, her citizens have the will, the practical experience and enterprise, as well as the means, for seizing the opportunity and thus to redress the balance upon lines which are likely to be generally beneficial. In this event, Canada may expect to benefit indirectly owing to her transatlantic position and to her internal conditions, which offer to Russians the best opportunities still available for emigration and settlement in a country which is under the flag of the British Empire—to-day Russia's best friend and ally.

APPENDIX "A."

Articles needed in Petrograd District.

Machinery Manufactures.

Agricultural machinery.
 " implements.
 Threshers.
 Tractors, steam and gasoline.
 Cream separators.
 Binder twine.
 Automobiles.
 Motor lorries.
 " accessories.
 Rolling stock.

Pressed steel frame (cars).
 Locomotives.
 Steel rails and fastenings.
 Bolts and nuts.
 Boilers.
 Oil motors.
 Marine gasoline engines.
 Hoists.
 Machinery—Saw mills.
 " Flour mills.
 " Mining (rock drills).
 " Oil well drilling.
 " Woodworking.
 " Electrical power and lighting.
 " Switches.
 " Switchboards.
 " Transformers.
 Stumping machines.
 Wringing "
 Washing "
 Grain elevator equipment.
 Steel pipes for oil-well pipe lines.

Chemicals.

Carbide of calcium.
 Acetate of lime.
 Acetone.
 Sulphate of ammonia.
 " soda.
 Patent medicines.
 Coal tar products—
 Pitch.
 Carbolic acid.
 Creosote.
 Drugs.
 Tanning extracts.

Articles of Consumption.

Fresh apples in cases.
 Canned apples.
 Evaporated apples in rings.
 " " sun-dried, whole or in quarters.
 Canned vegetables.
 " fish, pink salmon.
 Cod fish.
 Stock fish.
 Flour (Finland).
 Cheese.
 Lard.
 Abattoir products—
 Oil, tallow, stearine.
 Casings.

Miscellaneous Manufactures.

Leather for uppers, Chrome—Patent.
 Carriage leather.
 Harness "
 Leather belting.
 Boots and shoes.
 Belting—Balata.
 " Duck.
 Brooms and brush goods.
 Ceilings, metal and steel.
 Expanded metal (buildings).
 Metal laths.
 Enamelled ware.
 Hardware—Builders', furniture, carriage, locks.
 Safes and steel doors.
 Fittings, steam, water, gas.
 Pulleys, wood split.
 Electrical fittings and lamps.



A little talk to the Manufacturer on personal matters

You are a believer in time and labor-saving devices in your factory, of course. Are you as considerate, as particular, in your own home?

For example, just take your pencil and check off those of the following list of Electrical Appliances now in your home.

Electric Fan	Electric Tea Pot	Electric Stove
Electric Toaster	Electric Washing Machine	Electric Mangle
Electric Percolator	Electric Vacuum Cleaner	Electric Heater
Electric Iron	Electric Curling Tongs	Electric Grid
Electric Milk Warmer	Electric Chafing Dish	Electric Vibrator

How many have you got? Remember, every one of them will pay its way over and over again in comfort, convenience and quality. If not to you directly, then certainly to some or all of the members of your family.

While at the Exhibition, just linger for a few minutes at our Booth, West Entrance of Process Building, and see how fascinating, how valuable, yet low-priced the latest Electrical Appliances are when sold by

The
Toronto Hydro-Electric System

226 Yonge Street

Phone Adel. 2120

Office requisites.
 Filing cabinets.
 Organs (pipe).
 Pianos.
 Paints.
 Asbestos goods.
 News and printing paper.
 Rubber footwear.
 " overshoes.
 Corsets.
 Radiators.
 Typewriters.
 Sewing machines.
 Furs.
 Glue, fish glue, liquid glue.
 Handles for tools.
 Tools, axes, etc.
 Skates.

Metals, Etc.

Aluminium and aluminium castings.
 Billets, blooms, rods, bars.
 Wire nails.
 Nickel.
 Graphite.
 Babbit metal.
 Wire of all kinds.
 Barbed wire.
 Cobalt.
 Corundum.

APPENDIX B.

Imports of Chemicals Into Russia.

Acetanilid.
 Acids, Aceto-Salicylic.
 Carboic, Citric, Oxalic.
 Pyrogallie, Salicylic powder.
 Salicylic Crystals Tart.
 Crystals and Pulv.
 Argent viv. (Spanish).
 Argent Nitras Crystals.
 Fused.
 Aspirin.
 Auri Chlor.
 Bals. Copaibae filtered.
 Opt. B. P. and Peruv.
 Bismuth Carb. Salicylas and Subnit.
 Caffein Pur. and Citras B. P.
 Cassia-Fistula.
 Cassa Ligneae Quill.
 Carmine Pur.
 Caroyph.
 Chloral hydrate.
 Cocaine.
 Codeia Crystals.
 Hydroch., Phosp. and Sulph.
 Cremor Tart, pulv.
 Essence Bergamot, etc.
 Guarana.
 Hydrarg. Creta Ammon.
 Oxid. Rub., Perchlor.
 Subchlor.
 Alcohol, absolute.
 Aloes, cap. opt.
 Agar-agar.
 Ammon. Bromid. Carb. Iolid.
 Antimon.
 Antipirin.
 Hydroquinone.
 Ichthyol Ammon.

Iodine dry and re-sublimed.
 Litharge Lichen.
 Magnes. Carb. Levis.
 Menthol.
 Morphia Acet., Mur.
 Sulphate crystals.
 Musk, China and artificial.
 Opium, Tky., Pulv. B. P.
 Persian Opt.
 Oss Sepiae.
 Phenatecine.
 Piperazine.
 Plumb Acet. and Carb.
 Potass Chlor. crystals.
 Pulv. Iodide, Permang.
 Crystals Pav.
 Protargol.
 Spermaceti.
 Strychnine Crystals.
 Sulphonol.
 Vaseline.
 Synthetic Oils, etc.

The above chemicals in Appendix B were taken from a list in a recent number of the London "Chamber of Commerce Journal."

ODESSA AND SOUTH RUSSIA.

The Weekly Bulletin of the Department of Trade and Commerce of August 30 continues Mr. Just's report on opportunities for trade in Russia as regards Odessa and South Russia districts.

The Black Sea Basin takes more foreign and agricultural machinery than the rest of Russia, and the great bulk now goes from the United States. There is a growing trade in harvesting machinery, horse rakes and tedders. Formerly Germans did a good business in ploughs. Harrows of the disc pattern are in demand. There is a brisk demand for pumps. The report says:

"Post hole diggers are furnished by America and Germany, and prices vary from \$30 to \$85 per dozen. Forks are imported from the United States, France and England; they range in price, according to size, from \$1.90 each to \$11.25 a dozen. There is a great demand for forks in beet culture and in digging potatoes. Hoes come principally from England and sell for 25 cents to \$1 a piece. Sprayers are furnished by America, Germany and England; the latter appear to control the trade. Forges, which are in great demand, are made principally in Russia. America, however, has been able to enter this market. They are disposed of retail for \$14.25 to \$30.75. Rakes are a profitable article of export for America, though the Germans and Swedes are doing a brisker business in this commodity. The American make sells for \$5.20 a dozen or about 57 cents each. The German makes are much cheaper. Pruning knives are in demand, Russia and Germany filling this want at prices ranging from 37½ cents to \$1 each. The American knife comes much higher, retailing from \$1 to \$2.50 each. In shears the French lead, with Germany second. American shears retail at \$6 per dozen for the 7-inch length, and \$6.90 for the 9-inch length. American sickles retail at 50 cents. English and Austrian are lower in price. American lawn mowers come at \$5.70 to \$10, according to size."

Other articles for which Mr. Just says there is demand are: tractors, ploughing outfits, automobiles, boots and shoes, news paper, cheap typewriters, sewing machines, sugar factory supplies, red and white lead, steel thresher outfits, binder twine, flour milling machinery, fishing nets, miners' lamps, material for building grain elevators.

HAVE YOU ASKED THIS QUESTION:

"Which is the best Time Recording System for me to buy"—

The Individual Time Card or the Dial Recorder

Your business may demand one or the other but the great majority of users to-day prefer the Individual Card System—and the following are some of the reasons as compiled by our Research Department.



1. The Individual Card—that is a separate time card for each employee—is very valuable because of **THE GREATLY INCREASED PUBLICITY AT THE TIME OF RECORDING.**
2. **GREAT FLEXIBILITY OF THE CARD SYSTEM**, which allows an "IN CARD RACK" to be placed in each department, locked and opened only by the foreman, which does away with the loss of time, heavy in the aggregate, of the employee loitering between the Recorder and his bench. This check is impossible with the Dial Recorder.
3. *The employee has more confidence* in the Card System. He can see for himself that the record, at the time he makes it, is fair and correct, saving future disputes and giving him the proper mental attitude towards the recording system.
4. *In making up the pay roll*, the Individual Time Cards can be divided amongst several of the office staff, so that the work can be quickly done. With the Dial System one clerk, only, can handle the record.
5. The two color registration, the red showing every "late time in" and every "early time out," is an intensely valuable feature as every employee sees his own card 24 times a week, impressing him **EVERY TIME WITH HIS OWN TARDINESS OR SLACKNESS.**
6. **RELATIVE COST.** The individual Time Card System is, generally speaking, less expensive than the Dial Recorder.

Point number 2—FLEXIBILITY—explained above has brought about in thousands of plants the use of an Individual Card System in each department which not only saves the walking time but increases the output. This naturally reduces the overhead. This feature has been commented upon in hundreds of letters received from time to time by our users.

Why not take advantage of our skilled advice in selecting a Recording System that will save you money four times a day every working day in the year. Let us hear from you—writing for information puts you under no obligation to buy.

The International Time Recording Company of Canada, Limited

Offices—RYRIE BLDG.
Cor. Shuter and Yonge Streets

TORONTO, CANADA
Phone Main 2469

F. E. MUTTON
Manager



MR. GEORGE HENDERSON

Mr. George Henderson has been appointed President and General Manager of Brandram-Henderson, Limited, Halifax, N.S., in succession to his father, the late James R. Henderson, of Montreal, who died suddenly in Halifax recently.

The late Mr. Henderson came to Canada from Newcastle-on-Tyne and became interested in the Delphin Manufacturing Company which manufacture paints in Nova Scotia. In 1893 the firm became associated with the Brandram Bros. & Company, of London, England, and later branches were appointed at St. John, New Brunswick and Winnipeg. The late Mr. Henderson was Nova Scotia Vice-President of the Canadian Manufacturers Association and, after going to Montreal, was a member of the Montreal Executive for two or three years and also took a prominent part in the Paint and Oil Section of the Association.

Mr. George Henderson is a graduate of Dalhousie University and has been associated with the firm for many years. He is now Director and Manager of the Halifax Branch of the Company and is prominent in the manufacturing circles of the Maritime Provinces.

CONVENTION OF THE ILLUMINATING ENGINEERING SOCIETY.

The ninth annual Convention of the Illuminating Engineering Society will be held at the New Willard Hotel, Washington, September 20-23, 1915.

MILLING INDUSTRY IN SASKATCHEWAN.

Alone among the chief industries of Saskatchewan, the milling business has shown an increase in the volume of its business in 1914, as compared with the previous year. Since 1911, when the Bureau of Labor first began to collect statistics, this industry has shown a steady growth. In that year, there were operating in the province twenty-two mills, with a gross produce of \$3,596,934. In 1914 there were thirty-seven mills operating, three less than the previous year, and employ-

ing 510 men instead of 520, and less capital, but the number of working days in the year was increased on the average by sixteen, and the 1914 output was \$7,276,859, as compared with \$6,118,320 for 1913. An industry which seems to be making progress in this province is that of the foundries and machine shops, and though until the year 1914 it has not been considered sufficiently important to include with the other industries by reason of the probable smallness of the figures, still the amount of business done in 1914 has been recorded. There are such establishments in the province employing altogether fifty-four men, and the gross value of the output was \$202,380. —*Monetary Times.*

LEAD POISONING IN STORAGE BATTERY FACTORIES.

A bulletin recently issued by the U. S. Bureau Statistics shows that lead poisoning is far too prevalent in the storage battery factories of the United States. While in the largest factory of this kind in Germany the rate of lead poisoning is less than 1 per 100 employees, and in Great Britain about 3 in 100, in the five largest factories in the States the rate, based on reports known to be incomplete, is almost 18 per 100. The difference is said to be due to the neglect in the United States of factory sanitation and of personal care of the men employed. The bulletin in question points out the sources of danger and the best means of minimizing the same.

A BIG ENTERPRISE.

According to a Quebec despatch, a company has been incorporated under a Provincial charter, with a capital of \$3,000,000, to develop and supply hydro-electric power in the cities of Quebec and Three Rivers, and also to operate in several counties of the Province. Three of the incorporators are directors of the Shawinigan Water and Power Company, and two are directors of the Dorchester Electric Company, operating in the city of Quebec. The assets of the Dorchester Company are to be sold, and the Shawinigan Company are credited with the intention of securing a controlling interest. The incorporation of the new company is apparently a move in this direction. In the event of the Shawinigan Company supplying power to the Dorchester Company it will be necessary to build a transmission line from Shawinigan to Quebec. —*Contract Record.*

HELPING DYESTUFFS INDUSTRY.

The United States Department of Commerce is making such progress in developing the new dyestuffs industry that it claims that United States manufacturers will be placed on a competitive basis with Germany before the end of the war.

GREAT HARVEST IN RUSSIA.

The *Daily Mail's* correspondent at Petrograd quotes M. Krivoshein, Minister of Agriculture, as saying that the Russian harvest is not only better than in 1914, but greatly above the average for the five years preceding. The yield is estimated at 2,000,000,000 bushels, of which 571,000,000 bushels are wheat. During the five years preceding 1914 the average wheat yield was 478,000,000 bushels.

The Siberian harvest was below the average, but this fact is negligible when the abundance of the crops in eastern and southern Russia is remembered. —*Toronto Mail and Empire Despatch.*

The Pinnacle of Perfection In Time Recorders

IS REACHED BY THE INTERNATIONAL INDIVIDUAL CARD
RECORDING SYSTEMS. NOTHING FOR THE EMPLOYEE
TO DO BUT PUT HIS CARD IN THE SLOT
AND RECORD HIS TIME

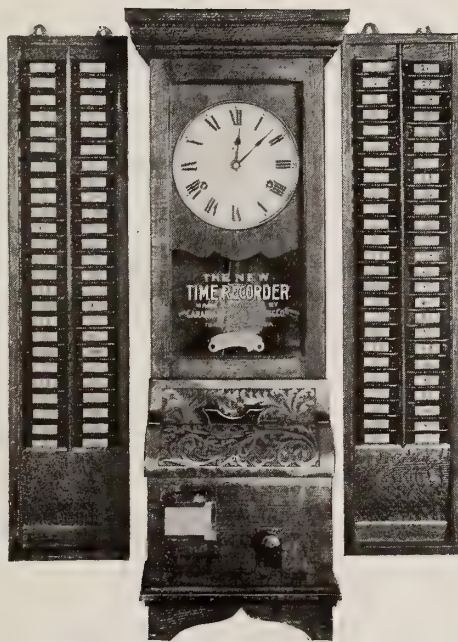
Time is valuable—you are entitled to get every minute of every employee's time you pay for. Are you getting it? Why not take the experience of thousands of men who have become close students of this problem and the fruit of whose knowledge is at your disposal in our service?

Do not judge our systems by their cost—judge by results.

One manufacturer said to us: "Your Recorders are the means of getting after the elusive 'non-chargeable hour,' which few of the manufacturers take into account and which costs them hundreds and thousands of dollars a year."

The following are a few amongst many prominent International users who, after the most thorough investigation selected the Individual Card System.

Steel Company of Canada
Department of Education
Westinghouse Electric Co.
Ross Rifle Company
Massey Harris Company
Copper Cliff Mining Co.
International Harvester Co.
Dominion Government



Russell Motor Car Co.
Ford Motor Car Company
T. Eaton Company, Limited
Canadian Fairbanks-Morse
Nova Scotia Steel Company
Packard Motor Car Co.
Lauzon Engineering Co.
Intercolonial Railway
And Many Others

The above illustrates an International Card Recorder—Best of its kind in the world
Prices range \$95.00 up, according to size and style

The International Time Recording Company is the largest distributor of Time Recording Systems in the World. We have furnished over 90% of the Time Recording Systems in use.

For careful, practical advice on the System best adapted to your needs you are cordially invited to write us to-day. It costs nothing to find out how much money we can save YOU. We are at the other end of your telephone wire.

The International Time Recording Company of Canada, Limited
TORONTO, CANADA

Offices—RYRIE BLDG.
Cor. Shuter and Yonge Sts.

Phone Main 2469

F. E. MUTTON
Manager

CHANGE OF OWNERSHIP OF RUDD CO.

The Rudd Paper Box Co., Limited, 374 Richmond St. West, Toronto, has recently changed hands, having been purchased by Messrs. L. W. Manchee and W. P. Bennett.

Mr. Manchee came to Toronto from New York in 1900 to organize and manage The Ideal Bedding Co. of Toronto. From a small start he carried it up to a large and substantial business, making it in every way a success. Ill health forced him to sell out his interest in 1911 and retire.

Mr. Bennett joined Mr. Manchee in 1907, acting first as Assistant Manager and, upon Mr. Manchee's retirement as Managing Director of The Ideal Bedding Co., which position he has resigned to enter the new field.

The Rudd Paper Box Co. make a full line of solid and folding boxes and mailing tubes, and has been favorably known to the trade for some years. The many friends of Messrs. Manchee and Bennett wish them every success in their new venture.

DEATH OF JAMES DICKSON.

We record with regret the death of Mr. James Dickson, President of the Dickson Bridge Works Co., Limited, which occurred on August 19th, in Campbellford, Ontario. The deceased was well and favorably known among the manufacturers of Ontario.

NEW COMPANIES.

Ottawa Valley Radial Co., Ltd., Ottawa, Ont.....	\$50,000
Standard Canning, Ltd., Ste. Philomène, Que.	50,000
Auto Products Co., Ltd., Ottawa, Ont.	250,000
Quebec Munitions Co., Ltd., Montreal, Que.	50,000
Montreal Motor, Ltd., Montreal, Que.	75,000
Montreal Leather Goods Co., Ltd., Montreal, Que....	50,000
Canadian Metal Cap and Seal Co., Ltd., Montreal...	600,000
Ideal Canning, Ltd., Ste. Dorothée, Que.	50,000
The E. J. Woodison Co., Ltd., Toronto, Ont.	100,000
The Canadian Ventilator Co., Ltd., Ottawa, Ont.	50,000
Dominion Saddlery Co., Ltd., Montreal, Que.	50,000
Peninsular Pulp & Paper Co., Ltd., Thorold, Ont....	200,000
Italian Wine Co. of Welland, Ltd., Welland, Ont....	40,000
Canadian Munitions Corporation, Ltd., Toronto, Ont.	500,000
Waterproof Stockings, Ltd., Toronto, Ont.	50,000
Windsor Mat Co., Ltd., Windsor, Ont.	40,000
The Butchers Abattoir Co., Ltd., Berlin, Ont.	40,000
The H. R. Rice Co., Ltd., Niagara Falls, Ont.	40,000
The Modern Clothing Co., Ltd., Toronto, Ont.	40,000
Harvard Hat Co., Ltd., Toronto, Ont.	40,000
Winnipeg Paper Box Co., Ltd., Winnipeg, Man.	50,000
Berry's Limited, Winnipeg, Man.	40,000

TRIAL TRIP OF ONTARIO No. 2 FROM THE YARDS OF THE POLSON IRON WORKS, LIMITED.

The Ontario No. 2, the large car ferry which is being built for the Ontario Car Ferry Company by Polson Iron Works, Limited, Toronto, made her trial trip on August 28th. The ferry is the largest steamer which has been built up to the present for operation on Lake Ontario. She has a carrying capacity of 30 coal cars and 1,000 passengers. When loaded her draught will be 16 feet 2 inches, the total tonnage 5,567. When carrying a capacity load she has a speed of

fifteen miles per hour and is so constructed that she can be used as an ice-breaker in winter. She will be put into commission about October 1st and will run between Cobourg, Ontario, and Charlotte, N.Y. The trial trip was a success in every way, and the Polson Iron Works Company is to be congratulated on their feat in shipbuilding.

CANADA'S EXPORTS OF LIVE CATTLE.

United States Now the Chief Buyer.

(From *Canadian Farm.*)

The efforts being made in Britain to secure the removal of the embargo against Canadian cattle gives interest to the following table, which shows the value of the exports of live cattle from Canada for the years named and where they were sent:

Fiscal Year.	United Kingdom.	United States.	Other Countries.	Total.
1900	\$7,579,080	\$1,401,137	\$100,559	\$9,080,776
1901	8,028,476	891,340	144,746	9,064,562
1902	9,742,738	787,864	133,217	10,663,819
1903	10,842,438	292,288	207,906	11,342,632
1904	10,046,651	119,942	258,078	10,424,671
1905	11,047,167	152,084	161,718	11,360,969
1906	11,045,463	206,102	405,264	11,656,829
1907*	10,200,137	478,765	253,637	10,932,539
1908	8,584,806	585,790	130,588	9,301,184
1909	10,115,793	543,456	112,117	10,771,366
1910	9,979,918	642,674	169,564	10,792,156
1911	7,942,144	465,079	130,250	8,537,473
1912	3,343,625	615,399	139,155	4,098,179
1913	913,954	1,116,923	206,258	2,237,135
1914	697,807	7,043,086	165,901	7,906,794

*Nine months.

Recent figures show that of the live cattle exported for the year ending March 31, 1915, 183,652 head went to the United States and 2,251 to other countries. For the year ending March 31, 1914, the number of cattle exported was 219,729, of which 206,446 head went to the United States. For the year ending March 31, 1913, the figures were 44,296, of which 28,268 went to the United States.

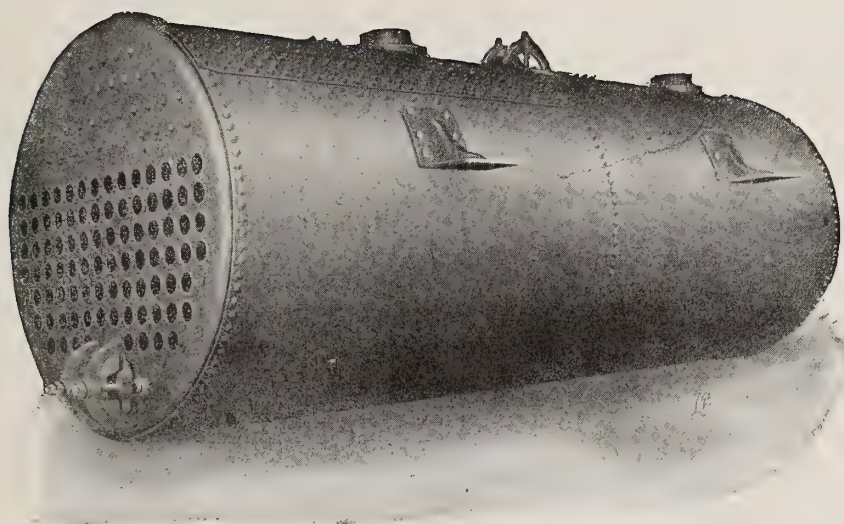
BUILDING ARMORIES IN U.S.

A proposal is under way to build a \$500,000 Regimental Armory for the National Guard of Indianapolis, U. S. A. A great Military Tournament, entitled "War in Indiana," will be held to assist in the campaign to raise funds.

DEATH OF ANDREW MALCOLM, EX-M.P.P.

Manufacturers throughout Canada will regret the death of Mr. Andrew Malcolm, Ex-M.P.P., President of the Andrew Malcolm Furniture Company, of Kincardine, Ontario. The deceased was born in Killearn, Stirlingshire, Scotland, and came to Kincardine in 1874. He was one of the pioneer manufacturers of Canada and, in addition to the Kincardine establishment, had a large factory in Listowel. In 1898 he was elected to the Legislature of Ontario for Centre Bruce.

BOILERS



STANDARD RETURN TUBULAR BOILER

We make boilers of all kinds for any service.

We are also sole Canadian makers of Erie City Water Tube Boilers, Vertical and Horizontal.

The large number of pleased and satisfied owners of "INGLIS" Boilers is our best advertisement.

For (52) fifty-two years our boilers have been the standard. We have installations of our different types of boilers, which our representatives will be pleased to show to prospective purchasers. Write us for prices, etc.

INGLIS' PRODUCTS ARE "MADE-IN-CANADA"

The John Inglis Company, Limited

ENGINEERS AND BOILERMAKERS

14 Strachan Avenue

Toronto, Canada

Ottawa Representative: J. W. ANDERSON, 7 Bank Street Chambers

THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President

ALEXANDER LAIRD
General Manager

JOHN AIRD
Ass't General Manager

CAPITAL PAID-UP, \$15,000,000
RESERVE FUND, \$13,500,000

Extension of Canadian Trade

The Bank will make enquiries into the possibilities and requirements of markets abroad for exporters or importers who desire to extend their trade with British colonies or possessions. Owing to the large number of its correspondents and agents it has unusual facilities for this work.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . \$25,000,000
Capital Paid up . . . \$11,560,000
Reserve & Undivided Profits \$13,000,000
Total Assets . . . \$180,000,000

HEAD OFFICE, MONTREAL

BOARD OF DIRECTORS

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E. F. B. Johnston, K.C., 2nd Vice-President

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E. L. Pease, General Manager
C. E. Neill and F. J. Sherman, Asst. Gen.-Managers
W. B. Torrance, Supt. of Branches

Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY—Corner William and Cedar Sts

Savings Department at All Branches

TRADE ENQUIRIES

The Weekly Bulletin of the Department of Trade and Commerce, from which some of these enquiries are taken, should be read regularly by those interested in foreign trade. It will be sent free on application to the Department at Ottawa.

182. **Wire.**—A London firm is in the market for iron wire, soft for weaving and hard for wire work, and asks for names of Canadian manufacturers.
183. **Steel Rails, Railway Ties, Fish Plates, etc.**—A Sheffield firm is open to buy steel rails for railroads and street car tracks and all kinds of railroad track equipment. They would also consider quotations on railway ties (sleepers) and keys.
184. **Brass Sheets and Rods, also Calcium Carbide.**—A London firm desires the addresses of Canadian manufacturers of brass sheets and rods, and also Calcium Carbide, who can quote for shipment to Australia.
185. **Aluminum.**—A Liverpool firm who are large buyers of granulated aluminum and also ingot and bar aluminum wish to get into touch with Canadian firms who can supply same.
186. **Machinery.**—A Cape Town firm of dealers with organization covering every district in Western Province is prepared to purchase, if suitable, or handle as agency, agricultural, dairy, irrigation or lighting machinery and prepared to handle on commission any article suitable for farm or farm house. On some lines would purchase outright.
187. **Woodenware and Brushes.**—A London firm would be pleased to receive from Canadian manufacturers catalogues and quotations of kitchen woodenware, including trays, also crumb brushes and hat and clothes brushes with metal ring attached.
188. **Tarpaulin, Rubber Clothing.**—A dealer in Central France invites quotations on above articles.
189. **Leather.**—A Paris agent wants prices and samples of "demi vache" leather tanned in oak bark.
190. **Iron and Steel Products.**—A London firm of iron and steel and metal merchants and agents, who claim an old established connection, wish to secure the representation of Canadian manufacturers of iron and steel products, bolts and nuts, hoop iron, and similar lines.
191. **Rolling Stock and Railway Material.**—A London firm of engineers reports that its Petrograd agent is in a position to secure orders for rolling stock and railway material, and would be glad to correspond with Canadian manufacturers of locomotives, passenger and freight cars, etc., open to consider representation in Russia.
192. **Skewers.**—A Manchester firm desire the addresses of Canadian manufacturers of wooden meat skewers.

Send For Our Booklet

Our Booklet "Repairing and Building" will be interesting to every property owner. It describes, among other things, the NEPONSET Roofings.

NEPONSET PAROID ROOFING

Is one of the best known of our brands. It is however only one of a large line. We also make felt paper and various other kinds of paper and paper board products, especially, waterproof paper such as case linings and building papers.



Bird & Son Hamilton, Ont.

MONTREAL ST. JOHN WINNIPEG
EDMONTON VANCOUVER

Coupon
BIRD & SON, Dept. H, Hamilton, Ont.
Please send facts about your roofing for
(Specify kind of building.)
Quote on paper as per sample attached and
specifications below. We use about
Name..... tons per year.
Address.....

BROWN BROS., LIMITED



Manufacturers of

ACCOUNT BOOKS

Loose Leaf Ledgers, Binders, etc.
Leather Goods, Diaries, Paper,
Stationery, Office Supplies

OFFICE AND FACTORY - - TORONTO
SIMCOE, PEARL AND ADELAIDE STS.

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

MANUFACTURERS OF

GAS AND GASOLINE ENGINES

TANKS
AND
TOWERS
FOR
Sprinkler
Systems

TOWN WATER
SUPPLY
ETC., ETC

PUMPS
CONCRETE
MIXERS

HOISTS, Etc.

Write, if interested



Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

For rates of freight and other information apply to

ELDER DEMPSTER & CO., Limited

318-319 BOARD OF TRADE BUILDING - - MONTREAL

Toronto Agent: S. J. SHARP, 19 Adelaide E.

THE

New Zealand Shipping Company, Limited

CANADA

TO

Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

The New Zealand Shipping Co.

LIMITED

213 Board of Trade Building, Montreal

193. **Triplex Paper.**—An agent who claims to be in the position to place orders for a thousand tons per annum of colored Triplex Paper has furnished references and wishes to get into touch with manufacturers. Samples can be supplied.
194. **Aluminum Bars, etc.**—An English house inquires for manufacturers of aluminum bars and other aluminum products.
195. **Hardware, Iron and Steel Goods.**—A London firm is desirous of representing Canadian manufacturers of the above goods on a commission basis. They claim to have an extensive connection and furnish references.
196. **Canned and Dried Fruit.**—A London firm is desirous of getting into touch with canners and evaporators who would consider appointing them sole representatives in the English market. References are furnished.
197. **Bond, Writing and Book Paper.**—A Scotch firm wishes to get into touch with Canadian manufacturers of these papers, who will be in a position to export. Quotations to be made c.i.f. Liverpool, or f.o.b. Canadian ports, provided that shipping facilities are favorable for Piraeus (Greece) or Marseilles. This firm offers references.
198. **Building Specialties.**—This office can put inquirers in touch with the Secretary of a large commercial organization in the United Kingdom, various members of which are desirous of representing Canadian manufacturers in England.
199. **Agency.**—A gentleman with considerable experience in Australia and New Zealand in hardware and general merchandise lines desires to represent Canadian manufacturers in New Zealand. A sketch of his experience and references are furnished.
200. **Furniture and House Furnishings.**—A South African Commission agent would like to get into touch with Canadian manufacturers of cheap chairs, tables and all kinds of furnishings.
201. **Agency.**—A South Africa Commission agent is desirous of getting into touch with Canadian manufacturers in order to represent them in that territory.
202. **Agency.**—A French Commission agent is desirous of getting into touch with Canadian manufacturers, either to represent them in France for the sale of their goods, or to purchase materials that they may require.
203. **Agency.**—A firm of Italian agents write us offering their services to any manufacturers who desire representation in Italy. Bank references furnished.
204. **Woollens, Linens, Cottons and Knitted Goods.**—A Cuban Commission House desires to get into touch with manufacturers of the above lines. Bank references furnished.
205. **Building Specialties.**—A large importing House in the Argentine is desirous of getting in touch with Canadian manufacturers of any building specialties.



and travel via THE
CANADIAN ROCKIES
 to the
PANAMA PACIFIC EXPOSITION

If you are planning your 1915 trip to San Francisco, make sure your ticket reads via Canadian Pacific, otherwise you will miss the grandeur beauty of nature's most stupendous works—The Canadian Rockies.

BANFF LAKE LOUISE FIELD GLACIER

Are important tourist stop-over points on the Canadian Pacific Railway route to the Pacific Coast. These have excellent hotel accommodation, with opportunities for riding, climbing, swimming, boating and golf.

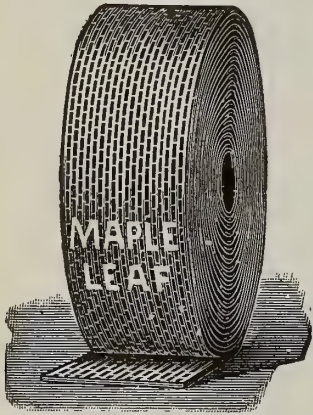
Agents will personally call on you to arrange your itinerary.

Particulars from any Canadian Pacific Ticket Agent, or write

M. G. MURPHY, District Passenger Agent, Toronto

If You Want Good Belting Get In Touch With Us

We are the sole manufacturers of
the celebrated



**"Maple Leaf"
Brand
Stitched
Cotton Duck
Belting**

The best on the market for TRANSMISSION OF POWER. CONVEYING, etc.

DOMINION BELTING CO. Limited
Hamilton, Canada

MORTON, PHILLIPS & CO.

000

**Stationers, Blank Book Makers
Printers and Publishers of Commercial
Tables, Etc.**

000

**115 NOTRE DAME ST. WEST,
MONTREAL**

Works : Gillette Building, 73 St. Alexander Street

Established
1849

BRADSTREET'S

Capital and Surplus - - \$1,500,000
Offices Throughout the Civilized World

Executive Offices : Nos. 346 and 348 BROADWAY, N.Y. CITY, U.S.A.

THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying, and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary, and business corporations. Specific terms may be obtained by addressing the Company at any of its offices.

Offices in Canada

Edmonton, Alta.
Halifax, N.S.
Montreal, Que.
St. John, N.B.

Hamilton, Ont.
Ottawa, Ont.
Toronto, Ont.
Winnipeg, Man.

London, Ont.
Quebec, Que.
Vancouver, B.C.
Calgary, Alta.

THOS. C. IRVING, Gen. Man. Western Canada, Toronto

AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Calgary, Alta.

Ten new elevators will be built in this district by the Western Canada Flour Mills Company.

BRITISH COLUMBIA.

The Provincial Government in co-operation with the Manufacturers Association in B. C. are collating information relative to the scope and output of all the industrial establishments in the province. The information is of a detailed character, and will be used by the Government in an organized effort to extend provincial trade.

The coast lumber mills report considerable inquiry for export, but the trade is restricted by lack of bottoms for shipment. Considerable orders have been received from the British Government who are providing ships to carry the lumber from Vancouver. Upward of twenty million feet have been arranged up to the present and further orders are in sight. The demand from the prairies is improving, and mills in the interior report better conditions.

Ainsworth, B.C.

The Silver Hoard mine is erecting a new concentrator.

The salmon catch on the Fraser River this season has not reached the proportions anticipated, and prices rule high for the fish. The up-coast canneries report better catches, and a fairly heavy pack is expected.

Bamberton, B.C.

The Associated Cement Co., Limited, will instal an electric shovel at their plant here.

Edmonds, B.C.

The Shell Oil Company have submitted plans and specifications to the Burnaby Council for the erection of a plant here. The plans, which entail an expenditure of \$110,000, call for the erection of wharfage, crib work, warehouses and several steel tanks having a capacity ranging from 5,000 to 38,000 gallons.

Esquimalt, B.C.

An oil refinery to cost \$175,000 will be erected by the Imperial Oil Company shortly.

Penticton, B.C.

The apricot crop here is a heavy one, and there will be a good pack of jam.

Revelstoke, B.C.

The Star Lumber Company's mill at Revelstoke has been destroyed by fire.

JULIUS COHEN & JOSEPHY

BRADFORD TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

H. V. ANDREWS, ^{Canadian} Representative 32 Church Street, Toronto, Canada

Toronto Sales Office
205 Yonge Street

Acid Open Hearth Steel Castings
for all purposes

Dominion Steel Foundry Company, Limited

Annual Capacity 15,000 Tons

Hamilton, Ontario

BEVERIDGE PAPER COMPANY, Ltd.

PIONEERS OF CANADIAN MADE KRAFT PAPERS

17-19 St. Therese Street - - - - MONTREAL

We carry large stocks of Kraft Rolls and Sheets, Brown and Colors—Can supply all grades of paper,
Bags and Twines at Lowest Prices.

Agents:—Mansfield Co.'s Watershed Waterproof Papers and Trotter's Scotch
Fine Writing and Printing Esparto Papers.

SAMPLES AND QUOTATIONS ON APPLICATION.

DELANY & PETTIT, LIMITED

Joint and Veneer
Glue

Always uniform.

OFFICE:

133 Jefferson Avenue,
TORONTO, ONT.



Special Woodworking
Garnet Paper and
Cloth

WORKS:

105-131 Jefferson Avenue
106-118 Atlantic Avenue



MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER

Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abramer that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED

450 BARTON ST. EAST

Hamilton :: :: :: Ontario

ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

NEW PROCESS GEARS RAWHIDE PINIONS

They last indefinitely too.

Ask us about it.

R. GARDNER & SON, LIMITED

Nazareth, Brennan and Dalhousie Streets
MONTREAL

Grand Forks, B.C.

The Boundary Iron Works have resumed operation, having now a considerable amount of work on hand as a result of the reopening of several mining properties in the district.

Greenwood, B.C.

The B. C. Copper Company's plant at Greenwood is the latest copper smelting plant to open up again, and with the exception of the Tyee Copper Company's Smelter at Ladysmith, all the smelters in British Columbia have resumed operations. The capacity of the whole of the smelters in British Columbia totals about 10,000 per day, including the silver-lead stacks at Trail, and with the addition of the Granby Company now under construction at Anyox, will be about 11,500 tons per day, which it is estimated should furnish an annual copper output of about 100,000,000 lbs.

Kelowna, B.C.

A syndicate has been formed with a capital of \$10,000 to operate a fruit cannery here this season.

Merritt, B.C.

H. Betterton is erecting a lumber mill at Brookmere, near Merritt.

Nelson, B.C.

The Cascade Lumber Mill of the Forest Mills Co. resumed operation this month after a shut down of one year. About eighty men are employed.

New Westminster, B.C.

The Brackman-Ker Milling Co., Ltd., have commenced erection of the second unit of their plant, consisting of a grain elevator of 50,000 bushels capacity, and modern granary buildings.

Prince Rupert, B.C.

The Queen Charlotte Lumber Mills have reopened after a shut down of two years.

A deposit of magnesite has been located on Atlin Lake and will shortly be developed.

Nanaimo, B.C.

Broder's Cannery of New Westminster will establish a cannery at Nanaimo. In addition, the premises formerly occupied by the Pacific Chocolate Co., Ltd., at New Westminster, have been leased, and fruit canning is being undertaken on a larger scale than before.

Steveston, B.C.

The Scottish Canadian Cannery has been purchased by Robert Graham, of Belleville, Ont., and it is stated will be used for the manufacture of evaporated vegetables and canned fruit.

Silverton, B.C.

The Galena Farm mine at Silverton is installing a 100-ton mill.



Cut of 50-inch "Extra" Double Belt

Made by The J. C. McLaren Belting Co., Limited.

WE ARE HEADQUARTERS FOR
ALL KINDS OF

BELTING
LACE LEATHER
CARD CLOTHING
REEDS AND
GENERAL
MILL SUPPLIES

ABSOLUTE SATISFACTION GUARANTEED

The J. C. McLaren Belting Co., Limited

ESTABLISHED 1856

Head Office and Factory
MONTREAL, Que.

Branches:
50 COLBORNE ST., TORONTO
80 LOMBARD ST., WINNIPEG

LEATHER BELTING

Made in Canada

J. L. Goodhue & Co., Limited
DANVILLE, QUEBEC

Manufacturers of
SUPERIOR QUALITY LEATHER
BELTING AND LACE LEATHER

QUALITY

Not Price Our Aim

Canadian Manufacturers SHOULD
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Winnipeg Agents:
BISSETT & WEBB, Limited
151 Notre Dame Ave. East
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Vancouver Agents:
FLECK BROS., Limited
1141 Homer St.
Vancouver, B.C.

*Made
in
Canada*



*From
British
Stock*

"GENUINE OAK"
LEATHER BELTING

"D.K."
BALATA BELTING

Guaranteed to Give Satisfaction

D. K. McLAREN LIMITED

TORONTO MONTREAL ST. JOHN, N.B.
847 Beatty Street, VANCOUVER
Engineer's Supply Co., 123 Bannatyne Ave. E., WINNIPEG



MANY Foreign Brushes have been imported for use by Canadian Factories and Consumers—in many cases due to the erroneous impression that Brushes of their special class could not be made in Canada. We make a line for every known use, including Special Machine and Factory Brushes, etc., their quality and values being much better than the imported article.

Your help either directly or indirectly to have more Brushes made in Canada, by Canadian Workmen, will be beneficial to this Country and to all concerned.

The Boeckh Bros. Company, Ltd.
TORONTO, CANADA


Vancouver, B.C.

Word has been received by the Provincial Government that the experimental shipment of rail ties of creosoted Douglas fir to India has given complete satisfaction. The shipment of 160,000 ties went last fall, and was made under Government inspection. Further and larger orders are in prospect, but no shipping is available at present. The consumption in India is large and regular.

The Vancouver Breweries, Limited, have installed a soda water and soft drink plant, and are turning out a full line of these products.

Messrs. W. H. Malkin Co., Limited, will build a factory here for the manufacture of food products.

The Western Salmon Packing Co., Limited, have been organized in Vancouver for the purpose of operating the Mill Bay cannery under lease from the Kincolith Packing Co., Limited.

Coast mills have received orders for approximately thirteen million feet of lumber for the Kettle Valley Railway, amounting in value to about \$150,000. The lumber will be used mainly for snow sheds.

All the salmon canneries which operated last season have prepared to pack this year, and a fair sized pack is expected. Over 1,300 licenses for salmon fishing have been issued for the Fraser River this year, the price for sockeyes opening at 35c.

Victoria, B.C.

The installation of a civic abattoir to cost \$20,000 is being considered by the City Council.

The Victoria and Island Development League are removing to new premises and will instal a permanent display of locally manufactured goods.

The steamer "Grahamland," a captured German collier, has been secured through the efforts of the Provincial Government to carry a cargo of lumber to the United Kingdom to assist in relieving the congestion of freight awaiting shipment.

The majority of the coast lumber mills are experiencing an improved demand from the prairies, and in view of the good crop reports, a better feeling exists than for some months past. In the meantime export business, while offering from many quarters, is impracticable owing to almost entire lack of shipping. Orders from the British Government are keeping some mills busy, and steamers have been provided by the Admiralty to carry such shipments. The returns for logs scaled in the district reporting to Vancouver is about thirty per cent. greater than for the same period last year, and many logging camps are in operation this season which were closed down last year.

MANITOBA.**Winnipeg, Man.**

The Manitoba Branch of our Association had a meeting on August 19th, when a War Purchasing Committee was appointed, with Mr. M. F. Christie as Chairman. The duties of this committee will be to put forth the claims of Winnipeg when war orders are being distributed, and to use their influence towards securing a larger percentage of these orders than has heretofore been granted.

ELECTRIC STEEL CASTINGS

WE CAN SUPPLY

*Carbon Manganese, Alloy, Steel Castings
Forging Ingots, Etc.*

Write for prices and particulars

The Electric Steel and Metals Company, Limited
WELLAND, ONTARIO

"CRANES MADE IN CANADA"



ELECTRIC TRAVELING CRANES

HAND POWER TRAVELING CRANES

ELECTRIC HOISTS	AIR HOISTS	FOUNDRY EQUIPMENT
NORTHERN CRANE WORKS, LIMITED	- - -	WALKERVILLE, ONTARIO

L. W. MANCHEE, President

W. P. BENNETT, Vice-President

RUDD PAPER BOX CO., LIMITED

374 RICHMOND ST., W.
TORONTO, CANADA

THE NEW MANAGEMENT SOLICITS CORRESPONDENCE ON
SET UP AND FOLDING PAPER BOXES OF ALL KINDS
:: :: MAILING TUBES, ETC. :: ::

IMPROVING BUSINESS CONDITIONS

BUSINESS conditions are undoubtedly improving in Canada and some manufacturers are doing a great deal towards improving them. From many points and in varied lines reassuring evidence is shown.

Establish and Maintain Your Advertising Franchise

The firms who will benefit earliest and most largely are those that keep up their advertising franchise, so to speak, and who realize that advertising is a potent factor in keeping up business as well as increasing it.

The Future Possibilities

Conditions in Canada after the war are going to be better, much more favorable to Canadian business interests and manufacturers. Enormous upheavals have changed the past unfavorable trade balance in Canada into a favorable one. The improved patriotic and business sentiment is establishing the "Made in Canada" movement as a permanent factor.

Well-Directed Advertising Effort

This Organization is the largest Advertising Agency in Canada. It has been established for over twenty-five years. Its experience is the widest, and it is able to give the best and most effective co-operation to manufacturers who should now be planning to take advantage of their present and future possibilities.

A. McKim Limited has Offices in Montreal, Toronto, Winnipeg, and London, England, and is therefore well equipped to give you the benefit of their intimate knowledge of trade conditions in all parts of Canada as well as in Great Britain.

We should be glad to submit complete plans and estimates for your present or future advertising.

A. McKim Limited

Toronto, Montreal, Winnipeg, London, England

NEW BRUNSWICK.

St. John, N.B.

H. H. Mott, Germain Street, is preparing plans for re-modelling the Provincial Bank, Charlotte Street. The improvements will cost in the neighborhood of \$12,000.

NOVA SCOTIA.

Halifax, N.S.

It is possible that the Imperial Oil Company will establish an asphalt and fuel oil refinery here at a cost of \$400,000.

New Glasgow, N.S.

Equipment which will cost \$75,000 is being installed by McNeil Brothers.

Somerset, N.S.

The Somerset Fruit Company will, in the near future, erect a fruit house, the approximate cost of which is \$3,500.

Sydney, N.S.

Wrights, Limited, are about to erect a furniture factory on Charlotte Street. Frank C. Redding, North Sydney, has been granted the contract which amounts to \$25,000. This figure does not include the cost of wiring.

ONTARIO.

Amherstburg, Ont.

The Falls Barron Company, Amherstburg, have under consideration the erection of a cold storage plant, the estimated cost of which is \$10,000. No architect has as yet been appointed.

Bridgeburg, Ont.

Announcement has been made to the effect that the King Separator Company, of Buffalo, N.Y., will erect a plant for the purpose of assembling parts of their Canadian product.

Chatham, Ont.

The Maritime Foundry Company, Water Street, have under consideration the erection of a shell factory, the estimated cost of which is \$40,000. The Manager of this concern is Mr. Frank McNaught.

Collingwood, Ont.

An extension will be made to the plant of the Tobey Tannery Company.

A by-law calling for the loan of \$20,000 to the Bryan Manufacturing Company to cover the cost of rebuilding planing mills recently destroyed by fire, was defeated.

Deseronto, Ont.

It is rumored that a syndicate has purchased a site for the purpose of erecting a plant for the manufacture of shells.

Fort William, Ont.

Rumor has it that the old Zenith Mine at Nipigon Bay will be opened again for active mining operations.



For a Quarter of A Century Our "A" and "AA" DUCKS

have been Favorites

with Manufacturers of Women's and Children's Summer garments. That they have given complete satisfaction is proven by their growing popularity.

"A" Ducks are the light grounds — "AA" Ducks the dark grounds. The range is very complete, providing material for summer wear from the cheapest to the most expensive.

Dominion Textile Co.

Limited

Montreal—Toronto—Winnipeg

Operating Twelve Mills; Employing Ten Thousand People.

Manufacturing White and Grey Cottons, Prints, Sheetings, Shirtings, Pillow Cottons, Long Cloths, Cambrics, Ducks, Bags, Twills, Drills, Quilts, Bureau Covers, Towels and Towelling, Blankets, Rugs, Twines and many other lines used by Manufacturers in Rubber and other Trades.

DOON TWINES

LIMITED

DOON, ONT.

Manufacturers of Fine Mattress, Tufting and Stitching Twines from flax and hemp

We also supply flax and hemp yarn for weaving

WRITE FOR PRICES

THE MONTREAL COTTONS

LIMITED

MANUFACTURERS OF

WHITE VICTORIA
LAWNS

WHITE NAINSOOKS

and

DYED COTTONS

OF EVERY DESCRIPTION

Galt, Ont.

A site has been purchased and plans prepared for the proposed alterations and additions to the Galt Machine Screw Company's factory, work on which will be commenced at an early date.

Gananoque, Ont.

Cowan & Britton, Limited, of Gananoque, which was established 54 years ago by Mr. C. E. Britton and the late O. D. Cowan, has been purchased by the Canada Steel Goods Company, Hamilton. Mr. R. B. Britton is to remain as manager.

Goderich, Ont.

For the purpose of manufacturing shells a factory is to be erected and machinery installed by the Doty Engine Company.

Kincardine, Ont.

In the course of a few weeks the Hunter Bridge and Boiler Company expect to commence work on the manufacture of shells for the British Government.

Kingston, Ont.

Recommendations have been made by the Canadian Fire Underwriters' Association to the effect that the capacity of the pumping plant be increased, a new boiler purchased for the pumps, and the water main be renewed between the pumping station and standpipe.

A planing and saw mill for S. Anglin & Company, Wellington Street, is now in the course of erection. The approximate cost of this mill is \$4,000.

London, Ont.

Beatty Brothers, Limited, are contemplating additions to their factory on York Street to the extent of \$3,000.

Milton, Ont.

To provide for the manufacture of textile fabrics, such as plushes, velvets, etc., machinery is being installed in the Milton Mfg. Company's new mill.

New Hamburg, Ont.

Loss amounting to between \$30,000 and \$40,000, partly covered by insurance, was sustained by the Electric Meteor and Stamping Metal Company on August 20th, when their entire building and contents were destroyed by fire. This concern employed about 75 hands.

Renfrew, Ont.

Mr. Low will erect a building to be used for the manufacture of shells.

St. Catharines, Ont.

Work will soon be commenced on the addition to the plant of Whitman & Barnes Mfg. Company for the manufacture of tools.

St. Marys, Ont.

It is reported that negotiations are now on foot looking towards an extension of St. Mary's cement plant, and that during the coming year another cement plant will be under way. A number of houses are also being built at the present time.

McClary's

Specialists in

HOTEL AND INSTITUTION KITCHEN APPLIANCES

and Manufacturers of the "FAMOUS" line of Goods including

Coal and Wood
FURNACES

Coal, Gas and Wood
STEEL AND CAST RANGES

Coal, Gas, Wood and Oil
HEATERS

ENAMELWARE, TINWARE AND OTHER KITCHEN WARE

LONDON
MONTREAL

VANCOUVER

TORONTO
WINNIPEG

McClary's

ST. JOHN, N.B.
CALGARY

EDMONTON

HAMILTON
SASKATOON

**COTTON
& WOOL
WASTE**

Made in Canada

BRANDS :

Cotton Polishing: Cream.

White Cotton Wiping:
XXX Extra, X Grand,
XLCR, X Empire, X
Press.

**WASHED
COTTON
WIPERS**

Colored Cotton Wiping: Fancy, Lion, Standard,
Popular, Keen.

Wool Packing: Arrow, Axle, Anvil, Anchor.

Washed Cotton Wipers: Select White, Mixed Colored,
Dark Colored.

Packed in Compressed Bales 500, 200, 100, 50, 25, 10, 5 lbs.

No liquid dope or clay used in any of our brands—nothing but threads.

SCYTHES & COMPANY, LIMITED

MANUFACTURERS AND JOBBERS

Also headquarters for Cordage, Twines, Cotton Duck
Oiled Clothing, Etc.

TORONTO
MONTREAL

Russell

*Made up to a Standard
not Down to a Price*

1916

"LIGHT SIX"

FOR 1916 we offer a refined and developed model of
the Russell Six "30."

A light weight beauty—Convenient—Economical—Inexpensive—of the Russell standard of comfort.

It gives you a Unit Power Plant, powerful and durable. It romps on high gear over hills that strain many other cars on low. The small bore, long stroke, high efficiency engine meets Canadian road requirements fully.

The new type Continental streamline body is comfortable. Moulded oval fenders. Three-quarter elliptic rear springs, long and wide. Long wheelbase. Ample tires.

Complete equipment in every detail. Vacuum feed from rear fuel tank. Rear tire carrier. Full floating rear axle. In fact, every feature that goes with the costliest cars of the highest grade.

\$1475 Lower in price, but improved in quality throughout.

RUSSELL KNIGHT "32"

A GAIN we feature the Russell-Knight "32" in five and seven-passenger models. They have met every demand of hundreds of owners for years. The 1916 product has been refined and improved and made more efficient at every point.

A beautiful family car—handsome, substantial, without fad or freakish design. Built to be pleasing and comfortable.

This car gives you new standards of efficiency, of flexibility, of power, of economy and of durability.

The owner of a Russell Knight has had the joy of ownership of a car of such advanced design that his car is never out of date, and is not replaced by some passing fad in design.

Performance and service prove its worth.

Superior design, high-grade materials, accurate workmanship, lasting finish and complete equipment make this a perfectly balanced car.

Ride in any other car, then ride in the Russell-Knight—the car for those who desire the best.

\$2650

Russell Motor Car Company Limited

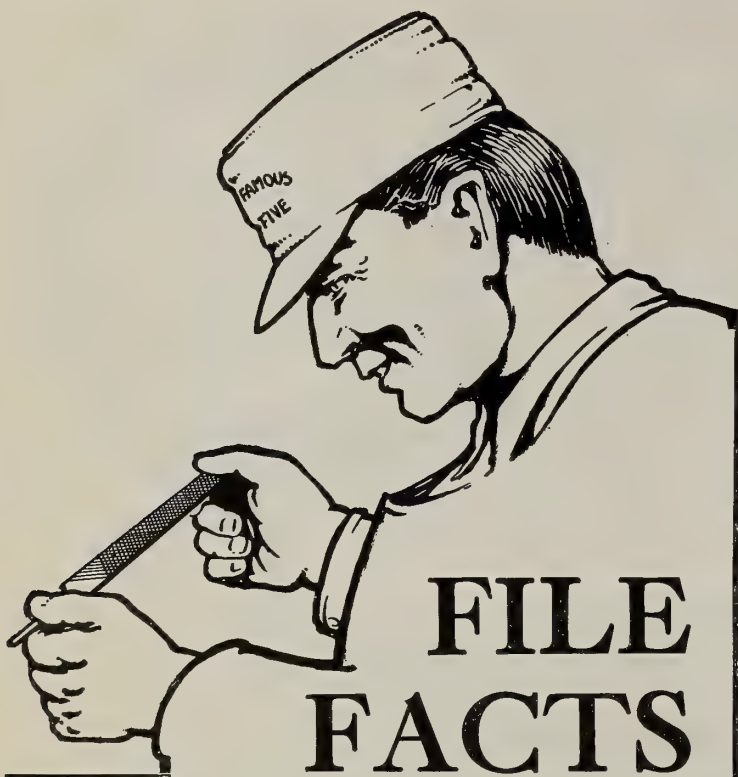
Executive Offices and Works: WEST TORONTO

Branches: TORONTO MONTREAL

HAMILTON

Sole Canadian Licensees Knight Motor

WINNIPEG VANCOUVER



It isn't enough to merely USE the
"Famous Five:"

KEARNEY & FOOT GREAT WESTERN AMERICAN ARCADE GLOBE

(MADE IN CANADA)

To get the VERY BEST results—you should use them RIGHT.

Teach your workmen that, at a certain point in its life on any work, a file's BEST efficiency is passed. Beyond that point—continued use means **lost time, wasted effort, decreased production and increased cost.**

When they understand this fact, they'll discard worn files promptly—as they should. They'll save enough time and labor to pay you a handsome net profit over and above the extra file-cost.

Only by using the "Famous Five" RIGHT do you get the FULL benefit of all we give. The benefit of our 50 years' experience—our five great plants—our special automatic machinery—our complete control of every factory process—our 60,000,000 yearly output—and our record of 90 per cent. of Canada's file trade.

Each and every one of these advantages should spell MORE NET PROFIT for YOU! Are YOU getting YOUR share, "File Philosophy" shows HOW. Write for FREE copy—NOW.

Nicholson File Company
Port Hope Dealers Everywhere Ontario

Smith's Falls, Ont.

Machinery to the value of \$35,000 will be installed by the Frost & Wood Company for the manufacture of shells, etc.

Southampton, Ont.

Within a short time a by-law will be submitted calling for the installation of a hydro-electric system at an approximate cost of \$13,000.

Toronto, Ont.

A permit has been granted the Bawden Machine Company for the erection of an addition to their shop, the cost of which will be \$2,500.

An order for shells has been granted to the Russell Motor Car Co., Limited.

The City Council has been asked by the Toronto Hydro-Electric Board to pass a by-law to raise \$1,375,000 to cover the following new work: sub-feeders and feeders generally, east end station, construction and equipment, additional equipment for direct current supply in down town district, increased general capacity of station and pole type transformers, additional services and meters, general line exten-

Northern Aluminum Co. LIMITED

1305-6 Traders Bank Building Toronto, Ont.

Sheet, Ingot, Rod,
Wire, Tubing,
Rivets, Extruded
Shapes, Bronze
Powder and Fabric-
ated articles.

We solicit
your enquiries
and will be glad
to serve you. Our
experience and know-
ledge of the metal will be
of value to you.

Write Us

NORTHERN ALUMINUM CO., LIMITED

DENNISTEEL
LONDON - CANADA

THE BEST STEEL LOCKERS MADE IN CANADA

MADE BY
THE DENNIS WIRE AND IRON WORKS CO. LIMITED
LONDON, CANADA

MALLEABLE IRON CASTINGS

HIGH TENSILE STRENGTH

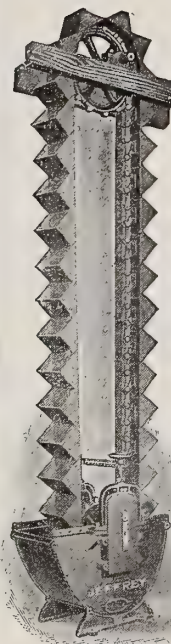


GALT MALLEABLE IRON CO.

LIMITED

GALT :: ONTARIO

JEFFREY Bucket Elevators



VARIOUS TYPES
TO SUIT ALL
CONDITIONS

Malleable and Steel
Buckets; Wood and
Steel Plate Casings;
Cast Iron, Wood and
Steel Boots; Take-
ups, Bearings, etc.

Chains and Attach-
ments for all Elevat-
ing and Conveying
Purposes; Sprockets;
Gears; Collars;
Couplings, etc.

Spiral, Belt, Wood and
Steel Apron Conveyers;
Tray Elevators; Screens;
Crushers, Pulverizers.

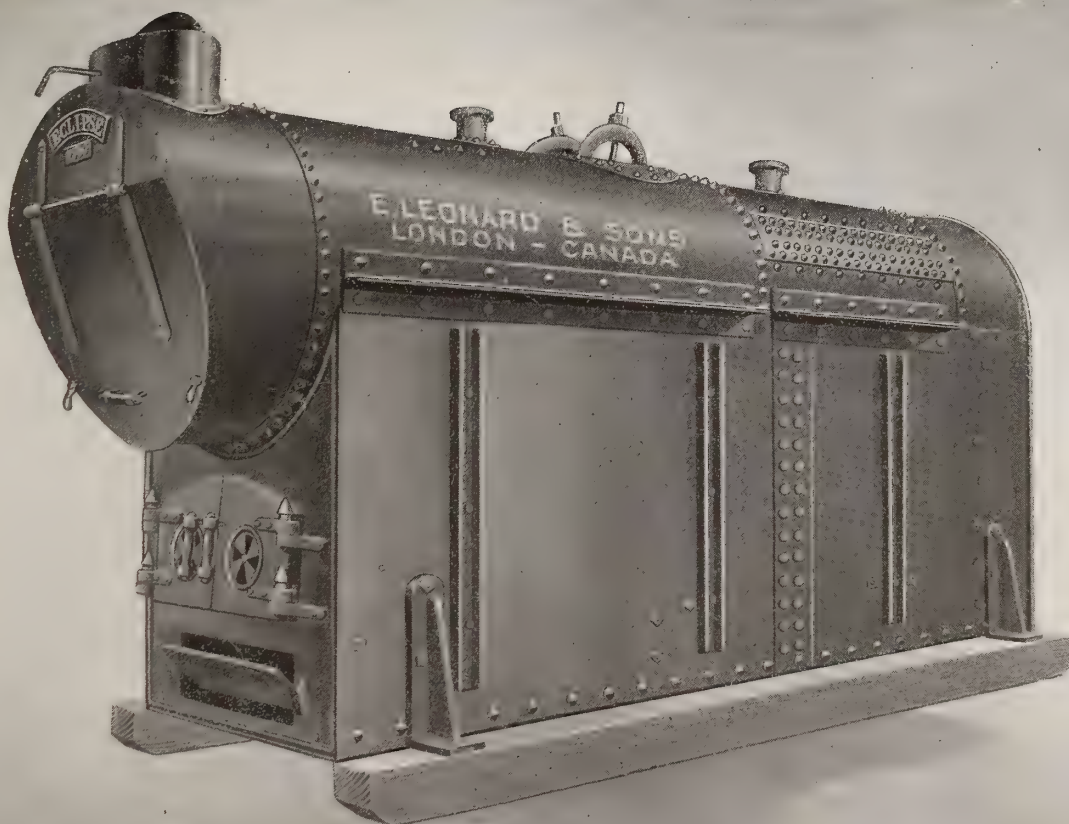


WRITE FOR BULLETINS:

No. 143-3—Elevator Buckets No. 83-3—General Catalog for 1915

Jeffrey Manufacturing Company

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NOTICE

**To Manufacturers, Dealers
and Users of Steam Boilers.**

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.
HON. FINLEY G. MACDIARMID, **D. M. MEDCALF,**
Minister of Public Works. Chief Inspector of Steam Boilers.

sions, Sterling Road transformer, house and equipment, additional requirements for civic car line service, towers to cross new channel for Ashbridge's Bay development and to complete the loop circuit to the Island, and general extensions and improvements as required to meet the general development of the business.

Welland, Ont.

Welland has been fortunate enough to secure the first Canadian reduction plant, which it is expected will be in operation by November next.

A large industrial plant in Welland has been acquired by the newly incorporated Canadian Zinc Company, owned by the Weedon Mining Company, who have entered into a contract with the Hydro-Electric for an initial allotment of 1,000 horse power. This makes the first electric smelting plant to be established in Welland.

Windsor, Ont.

As the result of the carriage of two money by-laws, which were voted on by the ratepayers on August 18th, the Devilbliss Atomizer Company was granted a fixed assessment of \$10,000 on its new factory, and the issuance of \$30,000 worth of debentures to cover the cost of local improvement work, completed last year, was authorized.

QUEBEC.

Cowansville, Que.

A plant is being erected by the Norwood Engineering Company for the manufacture of shells and ammunition.

Molesworth, Que.

A saw mill estimated to cost \$6,000 is now being erected for the Makamik Saw Mill Company, Makamik, Quebec.

Montreal, Que.

C. H. Johnson & Sons, Limited, 8 Dagenais Street, are about to make certain alterations in their factory, which will cost \$3,000. The plans for same are now under way, the designer and general contractor being A. F. Byers & Company, 340 University Street.

Announcement was made on August 23rd by Mr. W. W. Butler, Vice-President of the Canadian Car & Foundry Company, to the effect that an order for 100 box cars valued at \$100,000 had been received from the Alberta Great Waterways Company and the Edmonton, Dunvegan & British Columbia Railway. In addition to the above this Company also secured from the same source an order for switching and frog materials amounting to \$10,000, which will be manufactured by their subsidiary, The Canadian Steel Foundries.

Quebec, Que.

The Quebec Streams Commission will call for tenders in a short time for the damming of the St. Francis River at a point in the neighborhood of Disraeli, Co. Wolfe, on the Quebec Central Railway. It is estimated that the work will cost \$350,000.

SASKATCHEWAN.

Prince Albert, Sask.

J. M. Morrison, Architect, is now preparing plans for two stores to be erected on Central Avenue for H. B. Boyes, 1756 Nelson Street, Vancouver, B.C.



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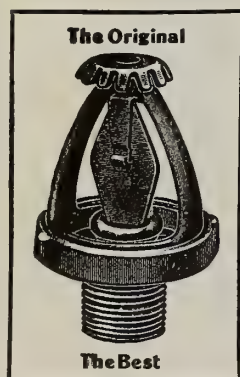
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NEW MANUFACTURING COMPANIES.

The following companies have been recently incorporated
for manufacturing purposes in Canada:

The Sims Packing Co., Limited, \$50,000, Charlottetown,
P.E.I.

Farmers Pork Packing Co., Limited, \$50,000, Estevan, Sask.
Regina Brewing & Packing Co., Limited, \$65,000, Regina,
Sask.

Canadian Western Foundry & Supply Co., Limited, \$1,000,-
000, Calgary, Alta.

Acme Paper Box Co., Limited, \$40,000, Winnipeg, Man.

The Monteith Pulp & Timber Co., Limited, \$40,000, Toronto,
Ont.

Cross Products, Limited, \$40,000, Toronto, Ont.

The Owl Manufacturing Co., Limited, \$40,000, London, Ont.
Miltons, Limited, \$250,000, Montreal, Quebec.

The F. S. Newman Co., Limited, \$100,000, Winnipeg, Man.
Canadian Footwear Co., Limited, \$150,000, Pointe-aux-
Trembles, Que.

Lachine Mfg. Co., Limited, \$120,000, Lachine, Que.

Nitrogen Products, Limited, \$120,000, Toronto, Ont.

North American Magnesite Co., Limited, \$200,000, Mont-
real, Que.

Alton Foundry Co., Limited, \$50,000, Alton, Ont.

The Canadian Dadco Co., Limited, \$75,000, Toronto, Ont.

The Harrison Landry Manufacturing Co., Limited, \$50,000,
Montreal, Que.

Vacuum Street Cleaning Machine Co., Limited, \$75,000,
Windsor, Ont.

Dominion Saddlery Co., Limited, \$50,000, Montreal, Que.

The Seed Treating Machine Co., Limited, \$50,000, Stratford,
Ont.

Allen Bros. Co., Limited, \$40,000, Toronto, Ont.

Universal Stove & Furnace Co., Limited, \$500,000, Toronto,
Ont.

Hugo Du Brock & Co., Limited, \$50,000, Toronto, Ont.

Creditvale Works, Limited, \$100,000, Toronto, Ont.

The Dominion Lime Co., Limited, \$100,000, Madoc, Ont.

The Chase Grain Dryer Co., Limited, \$100,000, Vancouver,
B.C.

Preston Packing Co., Limited, \$35,000, Vancouver, B.C.

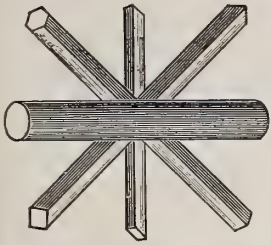
Eagle Harbor Packing Co., Limited, \$50,000, Vancouver,
B.C.

The Cable Auto Tire Co., Limited, \$250,000, Vancouver, B.C.

Canada Potash & Algin Co., Limited, \$100,000, Victoria, B.C.

THE OVERSEAS CLUB TOBACCO FUND.

The Overseas Club Amalgamated Tobacco Funds, 318
Stair Building, Toronto, has started a movement in Toronto
among manufacturing firms to organize the forwarding of
tobacco to Canadian soldiers abroad. "Industrial Canada"
is informed by a representative of this organization, Mr.
J. J. Walsh, that it is working in conjunction with the
British War Office, Admiralty and Army Service Transport,
and consequently has excellent opportunities to do the work
required. He also states that through the generosity of
manufacturers the fund is able to send 50 cigarettes and
about 4 ounces of tobacco with a stamped post card enclosed
with the name and address of the contributor for acknowl-
edgment by the recipient in the trenches, for every 25 cents
subscribed, and for \$1.00 a briar pipe, tobacco pouch, tin-
der lighter, 50 cigarettes and about 4 ounces of tobacco are
sent. All the tobacco sent from Canada is of Canadian
manufacture.



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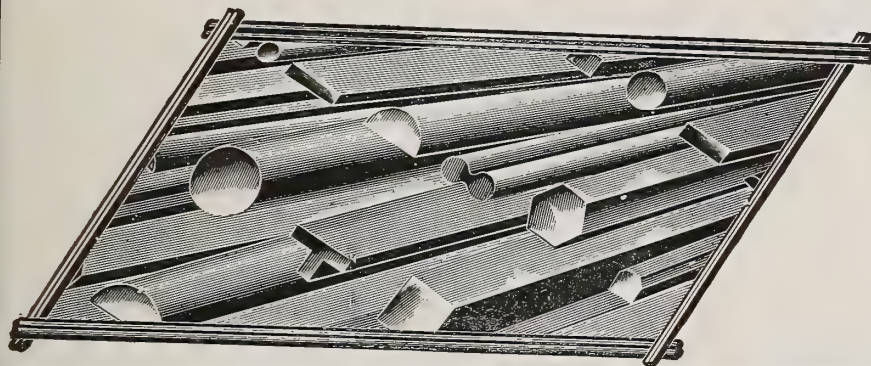
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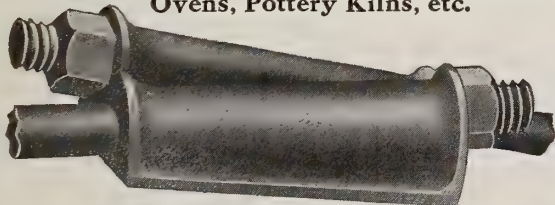
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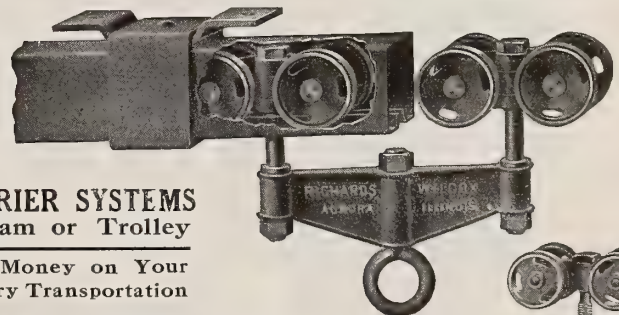
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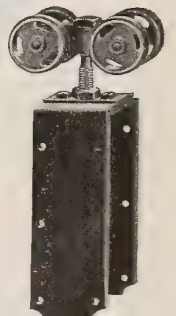


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MR. CHARLES DELANY HONORED.

Mr. Charles Delany, the senior member of Delany and Company, has been elected to the Vice-Presidency of the Kensington National Bank in place of Mr. Lewis Davis who has resigned. It is interesting to notice that Mr. Delany's father was President of the same bank for a number of years. Mr. Delany is connected with the Canadian firm, Delany and Pettit, Limited, Toronto.

CANADIAN IDEAS GOOD.

R. W. Ashcroft, Montreal, has been awarded the second cash prize of \$500 in the international competition conducted by the Rice Leaders of the World Association. This Association about a year ago offered \$3,500 cash prizes for ideas and suggestions relating to production, sales and advertising, the object being to develop suggestions which tend to improve the methods and products of United States manufacturers.

MEETING OF CHEMISTS.

The National Exposition of Chemical Industries will be held in New Grand Central Place, New York City, during the week of September 20th. It is proposed to create a Canadian section, and the Exposition will likely attract a considerable number of Canadian manufacturers of chemical products. The Exposition is being managed under first-class auspices and general lectures by men of prominence will be given on many subjects.

For further information apply to Mr. Alfred Burton, Secretary Canadian Section, Society of Chemical Engineers, 2 Liberty Street, Toronto.

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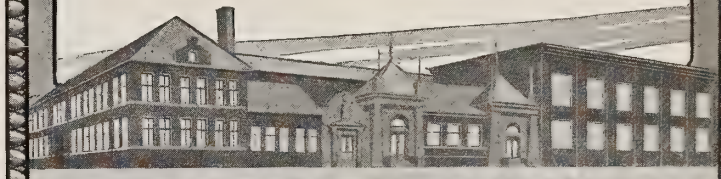
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BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCOUNTING FORMS

- Business Systems, Ltd., Toronto.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS

- *The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL

- The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- *Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE

- E. L. Drewry, Winnipeg, Man.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1305 Traders Bank, Toronto.

ALUMINUM CASTINGS

- *Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS

- *The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS

- *T. Pringle & Sons, Montreal.

ASBESTOS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR

- Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES

- *Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
- *Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES,

- *Northern Electric Co., Limited, Montreal.
- *Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS

- *Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton

- Hamilton Cotton Co., Hamilton, Ont.

AWNINGS

- *Smart-Woods, Ltd., Montreal.

AXLES

- Canada Forge Co., Ltd., Welland, Ont.
- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonzo W. Spooner, Limited, Port Hope, Ont.

*The Canada Metal Co., Toronto.

*Tallman Brass & Metal Co., Hamilton.

BACON

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS

- *Scythes & Co., Ltd., Toronto.

*Smart-Woods, Ltd., Montreal.

BAGS, Cotton

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Ltd., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal, Que.

Lamontagne, Ltd., Montreal, Que.

The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN

- *Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:

- *Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS

- *The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.

*Canada Wire and Iron Works, Hamilton.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS AND CAGES:

- *Canada Wire and Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS

- *Tallman Brass & Metal Co., Hamilton.

BARs, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARs, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Brantford, Ont.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- The Canadian National Carbon Co., Ltd., Toronto.

Canadian Carbon Company, Ltd., Toronto.

BEARINGS:

- *The Chapman Double Ball Bearing Co., Ltd., Toronto.

The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze

- *Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and upright,

- *Dodge Mfg. Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding

- *Otterville Mfg. Co., Ltd., Otterville, Ont.

*Smart-Woods, Ltd., Montreal.

BEEF

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BEER

- E. L. Drewry, Winnipeg, Man.

BELTING, chains.

- *Dodge Mfg. Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto.

*J. L. Goodhue & Co., Danville, P.Q.

*Sadler & Howarth, Montreal.

*The D. K. McLaren Belting Co., Ltd., Montreal.

*The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

*Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Limited.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BICYCLES AND ACCESSORIES

- *Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS

- Samuel May & Co., Toronto.

BINDERS, loose leaf

- Business Systems, Ltd., Toronto.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:

- *A. C. Leslie & Co., Montreal.

BLANK BOOKS:

- Business Systems, Ltd., Toronto.

*Morton, Phillips & Co., Montreal.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

J. Walsham & Son, Limited, Bolton, Ontario.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

*Smart-Woods, Ltd., Montreal.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS:

- *The Canadian Sirocco Co., Windsor, Ont.

*Sheldons, Ltd., Galt.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS

- *Canadian H. W. Johns-Manville Co., Toronto.

Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.

- *M. Beatty & Sons, Ltd., Welland, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

*Polson Iron Works, Ltd., Toronto

J. & R. Weir, Montreal, Que.

Taylor-Forbes Co., Ltd., Guelph, Ont.

*Jenckes Machine Co., Sherbrooke.

*The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, heating:

- *The Goldie & McCulloch Co., Ltd., Galt.

BOILERS, hot water or steam

- Warden King, Ltd., Montreal, Que.

BOILERS, steam.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

Steel and Radiation Ltd., Toronto.

Warden King, Ltd., Montreal, Que.

*The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, steam and brass work:

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Watrous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

BOILER STANDS

- Anthes Foundry Ltd., Toronto.

BOLSTERS

- *Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:

- *The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.

*The Steel Co. of Canada, Ltd., Hamilton.

Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS

- R. G. McLean, Toronto.

*The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS

- Stone Limited, Toronto.

R. G. McLean, Toronto.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES,

- Ames-Holden-McCreedy, Ltd., Montreal, Que.

J. Leckie Co., Ltd.

The John Ritchie Co., Ltd., Quebec, Que.

BOWLING ALLEYS

- Samuel May & Co., Toronto.

BOXES, cellular board:

- *The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden

- G. & J. Esplen, Montreal, Que.

Barchard & Co., Ltd., Toronto.

BRAIDS AND TRIMMINGS

- The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS

- *Tallman Brass & Metal Co., Hamilton.

BRASS, BR

BRASS PLATES

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*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS

Patterson & Heward, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.

Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Watrous Engine Works Co., Ltd., Brantford.

BRICK

National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer

National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway

Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.

*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters

Geo. Booth & Son, Toronto.

BROOMS

Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES:

*Boeckh Bros. Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUILDING

Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed

Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:

*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*Paterson Manufacturing Company, Toronto and Montreal.

BUILDING PAPERS

*Bird & Son, Hamilton, Ont.

BUILDERS, ship

*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS

The Canadian Bag Co., Ltd., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:

*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and tele-

phones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, Transmission and Cable:

*Northern Electric Co., Limited, Montreal.

CABLES, wire

The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS, ADVERTISING NOV-

ELTIES, etc.

Rolph & Clark, Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CAMERAS

Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS

Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOEES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin

A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty

A. R. Whittall, Montreal.

CANVAS

*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

CAPS, cloth

John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES

Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS

Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light

Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame

Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS

Canadian Carbonate Company, Limited, Montreal.

CARBIDE OF CALCIUM

Canada Carbide Co., Ltd., Montreal, Que.

CARDBOARD

Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Axminster

and ingrain
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels

and Wilton
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and

wool
Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

CARRIERS, box and barrel

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

CARRIERS, brick

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

CARS, industrial:

*Sheldons, Ltd., Galt.

CARTONS, lithographed

Harris Lithographing Co., Toronto.

CASTINGS:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass and bronze:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.

*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Record Foundry and Machine Co., Moncton, N.B.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:

*Galt Malleable Iron Co., Ltd., Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:

*Canadian Steel Foundries, Ltd., Montreal.
*Dominion Steel Foundry Co., Ltd., Hamilton, Ont.
Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

CATALOGUE MAKERS

Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA

Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS

Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPAR-

ATUS
The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM

Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS

Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO

Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel

The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS

*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVE-

MENTS
The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, TIME

*International Time Recording Co. of Canada, Ltd., Toronto.

CLOCKS, WATCHMEN'S

*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS

*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING

John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin

lined coats
A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

CLUTCHES.

*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.

COBALT OXIDE

The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE

PREPARATIONS
Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE

S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters

and Manufacturers
O. H. Cochran & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:

*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD DRAWN SHAPES, flats,

squares and hexagons:
*The Canadian Drawn Steel Co., Ltd., Hamilton.

*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

The Arlington Co., of Canada, Ltd., Toronto.

COLLARS

The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen

Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof

Williams, Greene & Rome, Berlin, Ont.

COLORS

Brandram-Henderson Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.

Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name

The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS

Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:

*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.

CONCENTRATORS:

*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.

The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR

WIRING
*Conduits Company, Ltd., Toronto.

CONFECTIONERY

Ganong Bros., Ltd., St. Stephens, N.B.

Moirs, Limited, Halifax, N.S.

The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:

*Dodge Mfg. Co., Ltd., Toronto.
*Jenckes Machine Co., Sherbrooke.

COOLING APPARATUS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS

*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE

Canadian Seamless Wire Co., Ltd., Toronto.

CORKS

S. H. Ewing & Sons, Montreal, Que.

CORK CARPET

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:

*Hinde & Dauch Paper Co., Toronto.
*Martin Corrugated Paper & Box Co., Ltd., Toronto.
*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS

Dominion Corset Co., Quebec, Que.

COTTONS

*Dominion Textile Co., Ltd., Montreal.
*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES

Hamilton Cotton Co., Hamilton, Ont.

COUPLERS

*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES

*Northern Crane Works, Walkerville.

COUPLINGS:

*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS

Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS

De Laval Dairy Supply Co., Ltd., Montreal, Que.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:

*The Dominion Creosoting Co., Ltd., Vancouver, B.C.
*Paterson Manufacturing Company, Toronto and Montreal.

CRUSHED STONE

The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:

*Jenckes Machine Co., Sherbrooke.

CUES

Samuel May & Co., Toronto.

CUPOLAS,

*Sheldons, Ltd., Galt.

CUPS, presentation

Standard Silver Co., Toronto.

CUPS, grease and oil

*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR

Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille

Hamilton Cotton Co., Hamilton, Ont.

CUTLERY

Standard Silver Co., Toronto.
Canadian Wm. A. Rogers, Ltd.

DENIMS

Hamilton Cotton Co., Hamilton, Ont.

DERAILS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS

Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.

Grip, Ltd., Toronto.

DINING ROOM SUITES

The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES

*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS

Spramotor Co., London, Ont.

DOOR HANGERS

*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS

Daly & Morin, Montreal, Que.

DREDGES

*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt

Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS

J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES

London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:

*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric

Canadian Carbon Co., Ltd., Toronto.

DRY COLOES

P. D. Dods & Co., Ltd., Montreal, Que.

The Imperial Varnish & Color Co., Ltd., Toronto.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS

Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE

The Dominion Wire Rope Co., Ltd., Montreal.

DYNAMITE

Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating

*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN

Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

ELECTRICAL COMPOUNDS

Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.

*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE

Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES

Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING

Central Press Agency, Toronto.

ELECTRICAL SUPPLIES,

*Canadian Westinghouse Co., Ltd., Hamilton.

*Jones & Moore Electric Co., Ltd., Toronto.

*Northern Electric Co., Limited, Montreal.

ELECTRO-SILVER PLATED WARE

Standard Silver Co., Toronto.

ELEVATORS:

*Jenckes Machine Co., Sherbrooke.

Turnbull Elevator Mfg. Co., Toronto.

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATORS FOR ALL PURPOSES

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS

Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS

*The Geo. B. Meadows, Toronto.

Iron and Brass Goods Works Co., Ltd., Toronto.

*Canada Wire and Iron Works, Hamilton.

ELEVATORS, hydraulic and electric

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

EMERY DRESSERS and STANDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS

R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE

McClary Mfg. Co., London, Ont.

ENGINES

*E. Leonard & Sons, London.

*The Canadian Sirocco Co., Windsor, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

J. & R. Weir, Montreal, Que.

*Polson Iron Works, Ltd., Toronto.

*Sheldons, Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

ENGINES, gas and gasoline

Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Massey-Harris Co., Ltd., Toronto.

ENGINES, gasoline tractor

plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, hoisting

*M. Beatty & Sons, Welland.

*Watrous Engine Works Co., Ltd., Brantford.

ENGINES, steam plowing and

threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

Rolph & Clark, Ltd., Toronto.

Stone, Limited, Toronto.

ENGRAVERS, half-tone

Grip, Ltd., Toronto.

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS, wood

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS,

steel plate

American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS,

banknote

American Bank Note Co., Ottawa, Ont.

ENGRAVING:

*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel

plate

Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW

OUTTERS

J. Fleury's Sons, Aurora, Ont.

ENVELOPES

Barber-Ellis Co., Ltd., Toronto.

Canada Envelope Co., Montreal, Que.

ENVELOPES, Transos,

Business Systems, Ltd., Toronto.

EXCELSIOR

*Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS

*Delany and Pettit, Ltd., Toronto, Ont.

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXPERTS IN PATENT CAUSES

Ridout & Maybee, Toronto.

EXPLOSIVES, high

Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS

Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and

creamery

De Laval Dairy Supply Co., Ltd., Montreal, Que.

J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:

*The Canadian Sirocco Co., Windsor, Ont.

*Sheldons, Ltd., Galt.

FASTENERS, belt

*Sadler & Haworth, Montreal, Que.

FENCES and GATES:

*Dennis Wire & Iron Works Co., London.

*Canada Wire and Iron Works, Hamilton.

FENCING AND GATES, woven

wire

Banwell Hoxie Wire Fence Co., Hamilton, Ont.

*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire

The Great West Wire Fence Co., Ltd., Winnipeg, Man.

O. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAILS:

*The E. B. Eddy Co., Ltd., Hull.

FILES

Henry Disston & Sons, Ltd., Toronto.

*The Nicholson File Co., Port Hope, Ont.

FIRE ALARMS,

*Northern Electric Co., Limited, Montreal.

FIRE DOOR HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:

*Watrous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:

*Canada Wire and Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS

*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.

*Canadian H. W. Johns-Manville Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS

*Watrous Engine Works Co., Ltd., Brantford.

FIRE HOSE

*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.

Dunlop Tire and Rubber Goods Co., Limited, Toronto.

*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*Eureka Mineral Wool & Asbestos Co., Toronto.

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FIRE SPRINKLER SYSTEMS.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.
 *The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.
 The Garth Co., Montreal, Que.

FISH. Atlantic Sea-Foods
 Maritime Fish Corporation Ltd., Montreal.

FITTINGS FOR SOIL PIPE
 Anthes Foundry, Ltd., Toronto.

FITTINGS, steam
 Warden King, Ltd., Montreal, Que.

FLAGS
 *Scythes & Co., Ltd., Toronto.
 *Smart-Woods, Ltd., Montreal.

FLASHLIGHTS
 Canadian Carbon Co., Toronto.

FLOORING, hardwood
 Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS
 Standard Clay Products, Ltd., St. Johns, Que.

FORGES:
 *Sheldons, Ltd., Galt.

FORGINGS
 Canada Forge Co., Ltd., Welland, Ont.
 *The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP
 *Dominion Stamping Co., Walkerville, Ont.

FOUNTAIN FRUITS and Juices
 J. J. McLaughlin, Ltd., Toronto.

FRICITION CLUTCH PULLEYS:
 *Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS, manganese
 Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL
 Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's
 Holt, Renfrew, Ltd., Quebec.

FUR GOODS
 John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons
 J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES
 Gurney Foundry Co., Ltd., Toronto.
 McClary Mfg. Co., London, Ont.
 The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air
 Bedford Stove Co., Bedford, Que.

FURNITURE, hall
 The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office
 Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office
 The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan
 Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:
 *A. C. Leslie & Co., Montreal.

GALVANIZERS
 Acme Stamping & Tool Works Ltd., Hamilton, Ont.
 *Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES
 *Ontario Wind & Pump Co., Ltd., Toronto.
 De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES
 *The Watrous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine
 Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground
 S. F. Bowser & Co., Toronto.

GASOLINE

*The Imperial Oil Co., Ltd., Toronto.

GEARS, CUT
 Hamilton Gear & Machine, Toronto.

GENERATORS:
 *Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
 *Canadian Westinghouse Co., Ltd., Hamilton.

GINS
 The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE
 Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut
 Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS
 Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS
 Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror
 Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS
 A. R. Clarke & Co., Ltd., Toronto
 Craig, Cowan Co., Limited, Toronto.

GLUE
 Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE
 Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS
 Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)
 J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE
 J. J. McLaughlin, Ltd., Toronto.

GRATES.
 *The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS
 Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal
 *Canada Wire & Iron Goods Co., Hamilton.
 *Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.
 *Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery
 *Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:
 *Canadian Hart Wheels, Ltd., Hamilton, Ont.
 *The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES
 *Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES
 The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS
 B. J. Coghlin Co., Ltd., Montreal.

GYPSUM, crushed
 *Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS
 *Manitoba Gypsum Co., Ltd., Winnipeg, Man.
 De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE
 The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS
 F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.
 *Dodge Mfg. Co., Ltd., Toronto.
 *The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE
 *Richards Wilcox Canadian Co., Ltd., London, Ont.
 Taylor-Forbes Co., Ltd., Guelph, Ont.

HARDWOOD FLOORING
 The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING
 Wilson Bros. Ltd., Collingwood, Ont.

HARDWOOD INTERIOR FINISH
 Wilson Bros., Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL
 Wilson Bros., Ltd., Collingwood, Ont.

HARNESSES
 Lamontagne Ltd., Montreal, Que.

HATS, men's straw
 The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw
 The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver
 The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw
 Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope
 The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS
 *The Canadian Sirocco Co., Windsor, Ont.
 *Watrous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:
 *The Goldie & McCulloch Co., Ltd., Galt.

HEATING APPLIANCES:
 *Sheldons, Ltd., Galt.

HEATING SYSTEMS
 Gurney Foundry Co., Ltd., Toronto.

HESSIANS
 The Canadian Bag Co., Ltd., Montreal, Que.
 *Scythes & Co., Ltd., Toronto.
 *Smart-Woods, Ltd., Montreal.

HINGES:
 *The Steel Co. of Canada, Ltd., Hamilton.

HOISTS
 *M. Beatty & Sons, Ltd., Welland, Ont.

HOISTS, electric and pneumatic.
 *M. Beatty & Sons, Ltd., Welland, Ont.

HOISTING MACHINERY.
 *M. Beatty & Sons, Ltd., Welland, Ont.

HOSE, fire
 *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
 Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial
 Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.
 *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
 Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
 *Gutta Percha & Rubber, Limited.

HUMIDIFIERS
 *The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES
 Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS
 Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY
 The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INCUBATORS & BROODERS
 Lee Mfg. Co., Ltd., Pembroke, Ont.

INDEX CARDS
 Business Systems, Ltd., Toronto.

INJECTORS, automatic and autopoitive
 Penberthy Injector Co., Ltd., Windsor, Ont.

INSULATION, patent seamless cork
 *Canadian H. W. Johns-Manville Co., Toronto.
 The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER

TILING
 *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
 *Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS
 Standard Clay Products, Ltd., St. Johns, Que.

IRON:
 *Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar
 Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.
 *The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:
 *Canada Wire & Iron Goods Co., Hamilton.
 *Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural
 *Canada Wire & Iron Goods Co., Hamilton.
 The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental
 *Canada Wire & Iron Goods Co., Hamilton.
 The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY
 A. R. Whittall, Montreal.

JAM, canned goods, etc.
 E. D. Smith & Son, Limited.

JAPANS, enamels, etc.
 A. Muirhead Co., Ltd., Toronto.

JOINTERS:
 *Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER
 S. H. Ewing & Sons, Montreal, Que.

JEWELRY, enamelled souvenir
 Caron Bros., Montreal, Que.

JEWELRY, gold filled
 Caron Bros., Montreal, Que.

JOIST HANGERS
 *Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR
 The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:
 *Sheldons, Ltd., Galt.

KINDLING
 Standard Fuel Co., Toronto.

KNIFE GRINDERS:
 *W. H. Banfield & Sons, Toronto.

KNITTED GOODS:
 *Penman's, Ltd., Paris, Ont.

KNIVES
 Henry Disston and Sons, Toronto, Ont.
 The Peter Hay Knife Co., Ltd., Galt, Ont.
 Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper
 Henry Disston and Sons, Toronto, Ont.
 The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES
 Canadian Kodak Co., Ltd., Toronto.

LABELS
 Lawson & Jones Ltd., London, Ont.

LABELS, lithographed
 Harris Lithographing Co., Toronto.

LACE LEATHER
 F. C. McCordick, St. Catharines, Ont.

*Sadler & Haworth, Montreal, Que.
 *The D. K. McLaren Belting Co., Ltd., Montreal.
 *The J. C. McLaren Belting Co., Ltd., Montreal.

LADDERS
 Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDERS, step
 *Otterville Mfg. Co., Ltd., Otterville, Ont.

LAGER
 E. L. Drewry, Winnipeg, Man.

<p>LARD F. W. Fearman Co., Ltd., Hamilton, Ont.</p> <p>LATH The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.</p> <p>LATHE CHUCKS Ker & Goodwin, Brantford, Ont.</p> <p>LATHE-DOGS: Canadian Billings & Spencer Ltd., Welland.</p> <p>LAUNCHES Peterboro Canoe Co., Ltd., Peterboro, Ont.</p> <p>LAWN MOWERS Taylor-Forbes Co., Ltd., Guelph, Ont.</p> <p>LAWN SWINGS Stratford Mfg. Co., Ltd., Stratford, Ont.</p> <p>LAVATORIES, enameled Amherst Foundry Co., Ltd., Amherst, N.S.</p> <p>LAUNDRY SINKS Amherst Foundry Co., Ltd., Amherst, N.S.</p> <p>LEAD * The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.</p> <p>LEAD GRINDERS Benjamin Moore & Co., Ltd., Toronto.</p> <p>LEAD SHEET Toronto Plate Glass Importing Co., Ltd., Toronto.</p> <p>LEAD PIPE *The Steel Co. of Canada, Ltd., Hamilton. Toronto Plate Glass Importing Co., Ltd., Toronto. *The Canada Metal Co., Toronto.</p> <p>LEATHER The Robson Leather Co., Ltd., Oshawa.</p> <p>LEATHER, bookbinders' Clarke & Clarke, Ltd., Toronto.</p> <p>LEATHER, fancy Clarke & Clarke, Ltd., Toronto.</p> <p>LEATHER GOODS Lamontagne, Ltd., Montreal, Que.</p> <p>LEATHER, hemlock sole The Breithaupt Leather Co., Ltd., Berlin, Ont.</p> <p>LEATHER, patent colt and side leather A. R. Clarke & Co., Ltd., Toronto.</p> <p>LEATHER, sheep skin, etc. Clarke & Clarke, Ltd., Toronto.</p> <p>LEATHER, upholstering. Clarke & Clarke, Limited, Toronto.</p> <p>LEATHER, upper A. Davis & Son, Ltd., Kingston, Ont.</p> <p>LINK BELTING. *The Dodge Mfg. Co., Ltd., Toronto. *The Goldie & McCulloch Co., Ltd., Galt, Ont.</p> <p>LINOLEUM Dominion Oil Cloth Co., Ltd., Montreal, Que.</p> <p>LITHOGRAPHED BUSINESS STATIONERY Business Systems, Ltd., Toronto.</p> <p>LITHOGRAPHED TIN WARE: *MacDonald Mfg. Co., Ltd., Toronto.</p> <p>LITHOGRAPHERS American Bank Note Company, Ottawa, Ont. Harris Lithographing Co., Toronto. *Montreal Lithographing Co., Montreal. Stone, Limited, Toronto. Rolph & Clark Ltd., Toronto.</p> <p>LOCKERS: *Canada Wire & Iron Works Co., Hamilton. *Dennis Wire & Iron Works Co., London. *Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.</p>	<p>LOCOMOTIVE BLOCKS Standard Clay Products, Ltd., St. Johns, Que.</p> <p>LOCOMOTIVES, industrial *Montreal Locomotive Works, Ltd., Montreal.</p> <p>LOCOMOTIVE & MARINE BRASS WORKS The James Morrison Brass Mfg. Co., Ltd., Toronto.</p> <p>LOOSE LEAF, BINDERS AND FORMS Business Systems, Ltd., Toronto.</p> <p>LOOSE LEAF SYSTEMS Copeland-Chatterson Co., Ltd., Toronto.</p> <p>LOOSE LEAF SUPPLIES The Esdale Press, Ltd., Edmonton.</p> <p>LUBRICATORS, steam sight feed Penberthy Injector Co., Ltd., Windsor, Ont.</p> <p>LUGS, for silos and water tanks *Otterville Mfg. Co., Ltd., Otterville, Ont.</p> <p>LUMBER The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont. G. & J. Esplen, Montreal, Que.</p> <p>LUMBER, asbestos: *Canadian H. W. Johns-Manville Co., Toronto. *Eureka Mineral Wool & Asbestos Co., Toronto.</p> <p>LUMBERING BLANKETS. Slingsby Mfg. Co., Ltd., Brantford, Ont.</p> <p>LUMBER, red pine and spruce Gillies Bros., Ltd., Braeside, Ont.</p> <p>LUMBER, spruce, fir, larch and cedar Ferne Lumber Co., Ltd., Fernie, B.C.</p> <p>LUMBER, white pine Gillies Bros., Ltd., Braeside, Ont.</p> <p>MACHINE TOOLS *John Bertram & Sons Co., Ltd., Dundas, Ont.</p> <p>MACHINERY, brick: *The Canadian Sirocco Co., Ltd., Windsor, Ont. *Sheldons, Ltd., Galt.</p> <p>MACHINERY, conveying. Canadian Mathews Gravity Carrier Co., Ltd., Toronto. *The Canadian Sirocco Co., Ltd., Windsor, Ont. *The Goldie & McCulloch Co., Ltd., Galt, Ont. *The Jeffrey Mfg. Co., Montreal.</p> <p>MACHINERY, elevating. Canadian Mathews Gravity Carrier Co., Ltd., Toronto. *The Goldie & McCulloch Co., Ltd., Galt, Ont. *The Jeffrey Mfg. Co., Montreal.</p> <p>MACHINERY, flour mill: *The Goldie & McCulloch Co., Ltd., Galt.</p> <p>MACHINERY, grinding *Canadian Hart Wheels, Ltd., Hamilton, Ont.</p> <p>MACHINERY, hoisting, etc. *The Jeffrey Mfg. Co., Montreal. *Polson Iron Works, Ltd., Toronto J. & R. Weir, Montreal, Que. *M. Beatty & Sons, Ltd., Welland, Ont.</p> <p>MACHINERY, ice cream J. J. McLaughlin, Ltd., Toronto.</p> <p>MACHINERY, iron working *John Bertram & Sons Co., Ltd., Dundas, Ont.</p> <p>MACHINERY, pulp mill *The Watrous Engine Works Co., Ltd., Brantford.</p>	<p>MACHINERY, pumping *The Canadian Sirocco Co., Ltd., Windsor, Ont. *The Watrous Engine Works Co., Ltd., Brantford.</p> <p>MACHINERY, punching and shearing *John Bertram & Sons Co., Ltd., Dundas, Ont.</p> <p>MACHINERY, railroad and car shop *John Bertram & Sons Co., Ltd., Dundas, Ont.</p> <p>MACHINERY, roadmaking Sawyer-Massey Co., Ltd., Hamilton, Ont. *Watrous Engine Works Co., Ltd., Brantford.</p> <p>MACHINERY, sawmill The E. Long Mfg. Co., Ltd., Orillia, Ont. P. Payette & Co., Penetanguishene, Ont. W. P. Plant, Hastings, Ont. *Watrous Engine Works Co., Ltd., Brantford.</p> <p>MACHINERY, special Bawden Machine Co., Ltd., Toronto.</p> <p>MACHINERY, tannery W. P. Plant, Hastings, Ont.</p> <p>MACHINERY, transmission *Dodge Mfg. Co., Ltd., Toronto. *Goldie & McCulloch Co., Ltd., Galt, Ont.</p> <p>MACHINERY, wood working *Berlin Machine Works, Ltd., Hamilton. *The Watrous Engine Works Co., Ltd., Brantford.</p> <p>MACHINE WRENCHES: *Canadian Billings & Spencer, Ltd., Welland.</p> <p>MACHINES, painting Spremotor Co., London, Ont.</p> <p>MAGNESITE Canadian Carbonate Co., Ltd., Montreal, Que.</p> <p>MAILING TUBES: *Dominion Paper Box Co., Ltd., Toronto.</p> <p>MALT: *Hiram Walker & Sons, Ltd., Walkerville.</p> <p>MAPS AND MAP MOUNTING The Geo. M. Hendry Co., Ltd., Toronto. Stone, Limited, Toronto.</p> <p>MARTINGALE RINGS AND SLIDE LOOPS The Arlington Co. of Canada, Ltd., Toronto.</p> <p>MATCHERS: *Berlin Machine Works, Ltd., Hamilton.</p> <p>MATCHES: *The E. B. Eddy Co., Ltd., Hull.</p> <p>MEATS, canned The Wm. Davies Co., Ltd., Toronto.</p> <p>MECHANICAL DRAUGHT *Canadian Sirocco Co., Windsor, Ont.</p> <p>MECHANICAL STOKERS, *The Jones Underfeed Stoker Co., Ltd., Toronto.</p> <p>MEDICINES, patented and pharmaceutical Dr. Ed. Morin & Cie., Ltd., Quebec.</p> <p>METAL, babbitt *Canada Metal Co., Toronto. *Tallman Brass & Metal Co., Hamilton. Alonzo W. Spooner, Limited, Port Hope, Ont.</p> <p>METAL CEILING: *Metallic Roofing Co., Ltd., Toronto. *Metal Shingle & Siding Co., Ltd., Preston. *Pedlar People, Ltd., Oshawa, Ont.</p> <p>METAL ROOFING *Pedlar People Ltd., Oshawa, Ont.</p> <p>METAL, spinning and stamping The Booth-Coulter Copper and Brass Co., Ltd., Toronto.</p> <p>METAL SHINGLES: *Metal Shingle & Siding Co., Ltd., Preston. *The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont. *Pedlar People, Ltd., Oshawa, Ont.</p>	<p>METAL SIDING: *Metallic Roofing Co., Ltd., Toronto. *Metal Shingle & Siding Co., Ltd., Preston. *Pedlar People, Ltd., Oshawa, Ont.</p> <p>MILK BOTTLE CAPS Business Systems, Ltd., Toronto.</p> <p>MILK DEALERS' MACHINERY AND SUPPLIES De Laval Dairy Supply Co., Ltd., Montreal, Que.</p> <p>MILLBOARD, asbestos: *Canadian H. W. Johns-Manville Co., Toronto. *Eureka Mineral Wool & Asbestos Co., Toronto.</p> <p>MILLING CUTTERS Pratt and Whitney Company of Canada, Dundas, Ont.</p> <p>MITTS AND GLOVES (Indian tan, red deerskins) Holt, Renfrew Ltd., Quebec, Que. A. R. Clarke & Co., Ltd., Toronto.</p> <p>MOCCASINS AND SLIPPERS (Indian tanned leathers) Holt, Renfrew, Ltd., Quebec, Que.</p> <p>MORTISERS: *Berlin Machine Works, Ltd., Hamilton.</p> <p>MOTOR CAR PARTS AND ACCESSORIES *Russell Motor Car Co., Ltd., Toronto.</p> <p>MOTORS: *Canadian Crocker-Wheeler Co., Ltd., St. Catharines. *Canadian Westinghouse Co., Ltd., Hamilton.</p> <p>MOTORS, D.C. *Canadian Crocker Wheeler Co., St. Catharines, Ont.</p> <p>MOTORS, electric (alternating current) *Canadian Westinghouse Co., Ltd., Hamilton. Consolidated Electric Co., Ltd., Toronto. *Jones & Moore Electric Co., Ltd., Toronto. *The Canadian Crocker-Wheeler Co., Limited St. Catharines.</p> <p>MOTORS, electric (direct current) *Canadian Westinghouse Co., Ltd., Hamilton. Consolidated Electric Co., Ltd., Toronto. *Jones & Moore Electric Co., Ltd., Toronto.</p> <p>MOTORS, electric (repairing) Consolidated Electric Co., Ltd., Toronto.</p> <p>MOTOR TRUCKS: *The Gramm Motor Truck Co., Ltd., Walkerville.</p> <p>MOULDERS: *Berlin Machine Works, Ltd., Hamilton.</p> <p>NAILS: *The Steel Co. of Canada, Ltd., Hamilton.</p> <p>NAILS, copper Parmenter and Bulloch Co., Ltd., Gananoque, Ont.</p> <p>NAILS, wire Parmenter and Bulloch Co., Ltd., Gananoque, Ont. The Graham Nail Works, Toronto.</p> <p>NAME PLATES Patterson and Heward, Toronto.</p> <p>NAPHTHA *The Imperial Oil Co., Ltd., Toronto.</p> <p>NICKEL OXIDE Coniagas Reduction Co., Ltd., St. Catharines, Ont.</p> <p>NUTS: *John Morrow Screw & Nut Co., Ltd., Ingersoll. *The National Acme Mfg. Co., Montreal.</p> <p>OAKUM, plumbers', Canadian Navy Factory Waste and Metal Co., Montreal, Que. *Scythes & Co., Ltd., Toronto.</p> <p>OAT CRUSHERS AND FLAKERS J. Fleury's Sons, Aurora, Ont.</p>
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OFFICE STATIONERY:

*The Montreal Lithographing Co., Ltd., Montreal.

OILS

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES

Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring

S. F. Bowser & Co., Toronto.

OIL COMPANIES

Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)

*British American Oil Co., Ltd., Toronto.

OILS, Petroleum

*The Imperial Oil Co., Ltd., Toronto.

OILS, road

*Paterson Manufacturing Company, Toronto and Montreal.

OILCLOTHS, floor and table

Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

ORGANS

*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe

Cassavant Freres, St. Hyacinthe, Que.

ORGANS, parlour

Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OVENS, portable bake

Bedford Stove Co., Bedford, Que.

OVERALLS

Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS

Rosamond Woollen Co., Aumont, Ont.

OVERHEAD RUNWAYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine:

*Garlock Packing Co., Hamilton.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS

R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:

A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge

Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative

Standard Paint Co. of Canada, Ltd., Montreal, Que.
*Paterson Manufacturing Company, Toronto and Montreal.

PAPER BOARDS

Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book

Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES

King Paper Box Co., Ltd., Montreal, Que.

*Rudd Paper Box Co., Ltd., Toronto.

PAPERS, bond

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, envelope

Provincial Paper Mills Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, KRAFT, wrapping printing and waterproof

*Beveridge Paper Co., Ltd., Montreal, Que.

PAPER, news

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building

Bathurst Lumber Co., Ltd., Bathurst, N.B.

*The Riordon Pulp and Paper Co., Montreal, Que.

Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, coated, book and label

*Ritchie & Ramsay, Ltd., Toronto.
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover

*Ritchie & Ramsay, Ltd., Toronto.
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board

*Ritchie & Ramsay, Ltd., Toronto.
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting

*Ritchie & Ramsay, Ltd., Toronto.
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes

Gummed Papers, Ltd., Brampton, Ont.

PAPER, label

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger

*Rolland Paper Co., Ltd., Montreal, Que.

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, super-book

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, wall

Stauntons, Ltd., Toronto.

PAPER, writing

The Toronto Paper Mfg. Co., Cornwall, Ont.

PAPER, writing, high-grade

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:

*Dominion Paper Box Co., Toronto.

PARK SEATS

Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDBRIES

The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION

Ridout and Maybee, Toronto.

PAY ROLL AUDITS

*International Time Recording Co. of Canada, Ltd., Toronto.

PEAS AND BEANS FOR SEED

W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:

*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET PREPARATIONS

Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS

Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANOS, player

*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANO STOOLS and BENCHES

*Goderich Organ Co., Goderich, Ont.

PICKLES:

The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS:

T. A. Lytle Co., Ltd., Toronto.

PIG IRON:

*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS ETC.

Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges.

Caron Bros., Montreal, Quebec.

PIPE, cast iron, for water and gas.

National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:

*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:

*Eureka Mineral Wood & Asbestos Co., Toronto.

PIPES, culvert

Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and galvanized

*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer.

Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.

Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings

Warden King Ltd., Montreal, Que.

PIPE AND TUBES, wrought merchant

*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off

Machines
John H. Hall & Sons, Limited, Brantford, Ont.

PISTON RODS

*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:

*Berlin Machine Works, Ltd., Hamilton.

PLANING MILLS

G. & J. Esplen, Montreal, Que.

PLASTER OF PARIS

*Albaster Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land

*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:

*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS

J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:

Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES

Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain

Daly & Morin, Montreal, Que.

POLES, telegraph and telephone, cedar

Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence

Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS

Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES

Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, baling

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer

William R. Perrin & Co., Ltd., Toronto.

PRINTED BUSINESS STATIONERY

Business Systems, Ltd., Toronto.

PRINTERS

Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:

R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING

Lawson & Jones, Ltd., London, Ont.

PRODUCE

The Wm. Davies Co., Ltd., Toronto.

PROVISIONS

The Wm. Davies Co., Ltd., Toronto.

PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Jeffrey Mfg. Co., Montreal, Que.

PULP, Bleached Sulphite
The Edward Partington Pulp and Paper Co., St. John, N.B.

PULP, Sulphide
Bathurst Lumber Co., Ltd., Bathurst, N.B.

PUMPS.
Spiramotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.

PUMPS, ammonia
*Bawden Machine Co., Ltd., Toronto.

PUMPS, boiler feed.
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt.

PUMPS, centrifugal
*M. Beatty & Sons, Ltd., Welland, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, iron
*Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.

PUMPS, tar
*Bawden Machine Co., Ltd., Toronto.

PUMPS, turbine, and equipment
*Bawden Machine Co., Ltd., Toronto.

PUMPS (Turbine and reciprocating)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

PYJAMAS AND NIGHT ROBES
Williams, Greene & Rome, Berlin, Ont.

RADIATORS
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.

RAILINGS, brass and iron:
*Dennis Wire & Iron Works Co., London.

RAILWAY SIGNAL APPLIANCES
General Railway Signal Co. of Canada, Ltd., Montreal, Que.

RAILWAY SUPPLIES.
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.

RAILWAY TARIFF BINDER.
The Esdale Press Ltd., Edmonton.

READY-TO-WEAR GARMENTS, Ladies'
H. C. Boulter Co., Ltd., Toronto.

REAMERS
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.

"REDWOOD" lager
E. L. Drewry, Winnipeg, Man.

REED AND RATTAN GOODS
Canada Furniture Mfgs., Ltd., Woodstock, Ont.

REFRIGERATORS
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.

REFRIGERATING MACHINERY
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

REFRIGERATORS, store, homes and institutions.
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.

REINFORCEMENT for concrete:
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.

RINGS, gold
Caron Bros., Montreal, Que.

RIVETS:
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

RIVETS, bifurcated and tubular
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

RIVETS AND BURS, iron, copper and brass
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ROLLERS, shade
Daly & Morin, Montreal, Que.

ROOFING, metal
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.

ROOFING, ready to lay
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*Paterson Manufacturing Company, Toronto and Montreal.

ROOFINGS
*Bird & Son, Hamilton, Ont.

ROOF TRUSSES
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.

ROPE
*Doon Twines Ltd., Doon, Ont.

ROPE, cotton
Hamilton Cotton Co., Hamilton, Ont.

RUBBER FOOTWEAR
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.

RUBBER GOODS.
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Ltd., Toronto.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

RUBBER MOULDS
Bawden Machine Co., Ltd., Toronto.

RULES
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.

EYE
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

SADDLERY HARDWARE
*Dominion Stamping Co., Walkerville, Ont.

SAFES
*Goldie & McCulloch Co., Ltd., Galt, Ont.

SAMPLE CASES
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.

SANDERS:
*Berlin Machine Works, Ltd., Hamilton.

SANDPAPER
Delany and Pettit, Ltd., Toronto, Ont.

SASH CORD, cotton
Hamilton Cotton Co., Hamilton, Ont.

SALT
Canadian Salt Co., Ltd., Windsor, Ont.

SANITARY PAPER TOWELS:
*E. B. Eddy Co., Ltd., Hull.

SAW SHARPENING MACHINERY
*Canadian Hart Wheels, Ltd., Hamilton, Ont.

SAWS
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.

SAWS, band:
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut
*Berlin Machine Works, Ltd., Hamilton.

SAWS, crosscut and band
Shurly & Deitrich, Galt, Ont.

SAWS, circular mill
Shurly & Deitrich, Galt, Ont.

SAWS, hack:
*Victor Saw Works, Ltd., Hamilton, Ont.

SAWS, of all kinds
Simonds Canada Saw Co., Ltd., Montreal, Que.

SAWS, rip:
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.

SAWMILLS
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.

SAWS, specialties
*Victor Saw Works, Ltd., Hamilton, Ont.

SCALES
The Gurney Scale Co., Hamilton, Ont.

SCALES, counter
The Gurney Scale Co., Hamilton, Ont.

SCALES, railway track, etc.
The Gurney Scale Co., Hamilton, Ont.

SCREENS:
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.

SCREEN DOORS AND WINDOWS
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.

SCREWS:
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.

SCREW PLATES
*Butterfield & Co., Rock Island, P.Q.

SECURITIES, engraved
American Bank Note Co., Ottawa, Ont.

SERGES
Rosamond Woollen Co., Almonte, Ont.

SHAFTING.
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.

SHANTY BLANKETS.
Slingsby Mfg. Co., Ltd., Brantford, Ont.

SHAPERS:
*Berlin Machine Works, Ltd., Hamilton.

SHEAR BLADES, iron
The Peter Hay Knife Co., Ltd., Galt, Ont.

SHEATHING
*Paterson Manufacturing Company, Toronto and Montreal.

SHEATHING, asbestos corrugated:
*Eureka Mineral Wool & Asbestos Co., Toronto.

SHEET METAL WARE (iron, galvanized and enamelled)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

SHEET METAL STAMPINGS
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.

SHELLAC
*Berry Bros., Ltd., Winnipeg.

SHINGLES, asbestos cement:
*Canadian H. W. Johns-Manville Co., Toronto.

SHIRTS
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island, Que.
John W. Peck & Co., Ltd., Montreal, Que.

SHIRTS, workmen's
A. R. Clarke & Co., Ltd., Toronto

SHOE PEGWOOD
O. Chalifour, Quebec, Que.

SHOE LININGS
Galt Knitting Co., Ltd., Galt, Ont

SHOES, running and athletic
Ames-Holden-McCready, Ltd., Montreal, Que.

SHOOKS
Barchard & Co., Ltd., Montreal, Que.

SILVER BULLION
Coniagas Reduction Co., Ltd., St. Catharines, Ont.

SILVERWARE
Toronto Silver Plate Co., Ltd.

SILVERSMITH
Canadian Wm. A. Rogers, Ltd., Toronto.
Standard Silver Co., Toronto.

SILVERWARE, sterling
Roden Bros., Ltd., Toronto.

SINKS, enameled
Amherst Foundry Co., Ltd., Amherst, N.S.

SKATES, figure
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, genuine Acme
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, hockey
Canada Cycle & Motor Co., Ltd., Toronto.

SKATES, ice
Canada Cycle & Motor Co., Ltd., Toronto.

SKIFFS
Peterboro Canoe Co., Ltd., Peterboro, Ont.

SKYLIGHTS:
*Metallic Roofing Co., Ltd., Toronto.
*Pedlar People Ltd., Oshawa, Ont.

SLEIGHS
Tudhope-Anderson Co., Ltd., Orillia, Ont.

SLIPPERS
Ames-Holden-McCready, Ltd., Montreal, Que.

SMOKE CONSUMERS.
*The Jones Underfeed Stoker Co., Ltd., Toronto.

SOAPS
J. Barsalou & Co., Ltd., Montreal, Que.

SOAP (soft, oil)
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

SODA WATER FOUNTAINS
J. J. McLaughlin, Ltd., Toronto.

SOIL PIPE
Anthes Foundry, Ltd., Toronto.

SOLDER
Alonso W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.

SOLDER, silver
Geo. H. Lees & Co., Hamilton.

SOLDER, wire and bar
*American Can Co., Montreal, and Hamilton.

SNOWSHOES
Holt, Renfrew, Ltd., Quebec, Que.

SPARK PLUGS
Canadian Carbon Co., Ltd., Toronto.

SPIRAL CONVEYORS.
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

SPLIT PEAS
H. Murton, Guelph, Ont.

SPIKES, railway and marine
Starr Mfg. Co., Ltd., Dartmouth, N.S.

SPIRITS
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.

SPORTING MEDALS AND TROPHIES
Roden Bros., Ltd., Toronto.

SPRAYERS
Spiramotor Co., London, Ont.

SPRING COTTERS
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

SPRINGS
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINGS, carriages and automobile
Guelph Spring & Axle Co., Ltd., Guelph, Ont.

SPRINKLER SYSTEMS.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

STAINS

R. C. Jamieson & Co., Ltd., Montreal, Que.

STAINS, creosote shingle

A. Muirhead Co., Ltd., Toronto.

STAMPINGS

*Dominion Stamping Co., Ltd., Walkerville, Ont.

STAMPS, steel, brass and rubber
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STAMP MILLS:

*Jenckes Machine Co., Sherbrooke.

STATIONERY, office
Harris Lithographing Co., Toronto.

STEAM PIPE and BOILER COVERINGS, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

*Eureka Mineral Wool & Asbestos Co., Toronto.

STEAM SHOVELS

*M. Beatty & Sons, Ltd., Welland, Ont.

STEAM SPECIALTIES:

*Sheldons, Ltd., Galt.

STEAM TRAPS

*Canadian Sirocco Co., Windsor, Ont.

*Canadian Morehead Manufacturing Co., Limited, Woodstock.

STEEL:

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

STEEL BUILDINGS

*The Canadian Bridge Co., Ltd., Walkerville, Ont.

*Dominion Bridge Co., Ltd., Montreal.

*Pedlar People, Ltd., Oshawa, Ont.

STEEL CASTINGS

*Canadian Steel Foundries, Ltd., Montreal, Que.

*Dominion Steel Foundry Co., Ltd., Hamilton.

STEEL PEN STOCKS:

*Jenckes Machine Co., Sherbrooke.

STEEL RODS:

*The Steel Co. of Canada, Ltd., Hamilton.

STEEL SASH:

*Dennis Wire & Iron Works, Co., London.

*Henry Hope & Sons, Ltd., Toronto.

STEEL SHELVEING:

*Dennis Wire & Iron Works, Co., London.

TELEPHONE ACCESSORIES,

*Northern Electric Co., Limited, Montreal.

STENCILS, brass

Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

STEREOTYPING

Central Press Agency, Toronto.

STOKERS,

*The Jones Underfeed Stoker Co., Ltd., Toronto.

STOOLS AND BENCHES, piano and organ

*Otterville Mfg. Co., Ltd., Otterville, Ont.

STONE

The Corinthian Stone Co., Guelph, Ont.

The Hagersville Contracting Co., Hagersville, Ont.

STORE FITTINGS

The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

STOVES

Tudhope-Anderson Co., Ltd., Orillia, Ont.

Bedford Stove Co., Bedford, Que.

STOVE BOARDS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

STOVE LININGS

Standard Clay Products, Ltd., St. Johns, Que.

STOVES AND RANGES

Bedford Stove Co., Bedford, Que.

Gurney Foundry Co., Ltd., Toronto.

Lee Mfg. Co., Ltd., Pembroke, Ont.

The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

McClary Mfg. Co., London, Ont.

STRETCHERS, lace curtain

*Otterville Mfg. Co., Ltd., Otter

STRUCTURAL STEEL

Dominion Bridge Co., Montreal.

*Hamilton Bridge Works Co., Ltd., Hamilton.

*The Canadian Bridge Co., Ltd., Walkerville, Ont.

*The Structural Steel Co., Ltd., Montreal.

SUIT CASES

J. Eveleigh & Co., Ltd., Montreal

The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

SURFACERS:

*Berlin Machine Works, Ltd., Hamilton.

SWITCHBOARDS

*The Canadian Independent Telephone Co., Ltd., Toronto.

SWITCHES, railway

Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

SWITCHES AND FROGS

*Canadian Steel Foundries, Ltd., Montreal, Que.

SWITCH STANDS

*Canadian Ramapo Iron Works Ltd., Niagara Falls, Ont.

TABLES, billiard

Samuel May & Co., Toronto.

TABLE COVERS, chenille

Hamilton Cotton Co., Hamilton Ont.

TAGS, shipping and factory
Business Systems, Ltd., Toronto.

TANKS

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Ontario Wind Engine & Pump Co., Ltd., Toronto.

*The Goldie & McCullough Co., Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

TANNERS' SUPPLIES

McClary Mfg. Co., London, Ont.

TAPS

Pratt and Whitney Co. of Canada, Dundas, Ont.

*Butterfield & Co., Rock Island, P.Q.

TAP WRENCHES

*Butterfield & Co., Rock Island, P.Q.

TAPES, measuring

The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.

TAPES, paper and cloth, gummed and ungummed

Gummed Papers, Ltd., Brampton, Ont.

TELEPHONE ACCESSORIES

Canadian Independent Telephone Co., Toronto.

*Northern Electric Co., Limited, Montreal, Que.

TELEPHONE APPARATUS

*The Canadian Independent Telephone Co., Ltd., Toronto.

TELEPHONES, Automatic

*Canadian Independent Telephone Co., Toronto.

TENTS

Mackenzie & Co., Ottawa, Canada

Turner, J. J., & Sons, Peterborough, Ont.

*Seythes & Co., Ltd., Toronto.

TERRA ALBA

*Albert Mfg. Co., Hillsborough, N.B.

TERRA COTTA (architectural)
Toronto Plate Glass Importing Co., Ltd., Toronto.

THEATRE CURTAINS, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

THUMB SCREWS:

*Canadian Billings & Spencer, Ltd., Welland.

TILING, interlocking rubber.

Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Ltd.

TIMBER:

*The B.C. Mills Timber & Trading Co., Vancouver, B.C.

TIME RECORDERS

*International Time Recording Co. of Canada, Ltd., Toronto.

TIN WARE (stamped, pierced, japanned and lithographed)
Sheet Metal Products Co. of Canada, Ltd., Toronto.

TIRES, cycle, auto and truck.

Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Ltd.

TRADE MARKS AND DESIGNS
Ridout & Maybee, Toronto.

TRANSFORMERS

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TRANSFORMERS, power

*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TRANSFORMERS, distributing

*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.

TOOLS, track

B. J. Coghlin Co., Ltd., Hamilton, Ont.

TRANSMISSION MACHINERY.

*Dodge Mfg. Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Watrous Engine Works Co., Ltd., Brantford.

TROLLEYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

TRUCKS

The Gurney Scale Co., Hamilton, Ont.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TRUCKS, brick, tile and lumber

*Watrous Engine Works Co., Ltd., Brantford.

TRUNKS

Lamontagne Ltd., Montreal, Que.

J. Eveleigh & Co., Ltd., Montreal, Que.

The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.

TUBING, Brass and Copper

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

Canadian Seamless Wire Co., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

TUBING, Gold and Silver

Canadian Seamless Wire Co., Toronto.

TURBINES, water.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

TURBINES, steam:

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

TURBINE AND RECIPROCATING PUMPS.

*The Bawden Machine Co., Limited, Toronto.

TWEEDS

Rosamond Woollen Co., Almonte, Ont.

TWINES

*Doon Twines Ltd., Doon, Ont.

TWINES, binder

Brantford Cordage Co., Ltd., Brantford, Ont.

TWINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

TWIST DRILLS

Pratt and Whitney Co., of Canada, Dundas, Ont.

*The Wilt Twist Drill Co., Ltd., Walkerville, Ont.

UNDERWEAR

Galt Knitting Co., Ltd., Galt, Ont.

UNDERWEAR, imperial

Kingston Hosiery Co., Ltd., Kingston, Ont.

UNIONS

*Dart Union Co., Ltd., Toronto, Ont.

*Otterville Mfg. Co., Ltd., Otterville, Ont.

UNDERWEAR TRIMMINGS

The Whitby Braid & Edging Co., Woodstock, Ont.

UPHOLSTERED FURNITURE, leather and tapestries
Imperial Rattan Co., Ltd.

VACUUM PUMPS

*The Bawden Machine Co., Limited, Toronto.

VALVES:

*Kerr Engine Co., Ltd., Walkerville.

VALVES, for steam and water
Jenkins Bros., Ltd., Montreal, Que.

VALVES, regrinding globe, angle cross checks, swing checks, etc.

Penberthy Injector Co., Ltd., Windsor, Ont.

VARNISHES

*Ault & Wiborg Co. of Canada, Ltd., Toronto.

Berry Bros., Walkerville, Ont.

*Dougall Varnish Co., Ltd., Montreal.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Sherwin-Williams Co. of Canada, Ltd., Montreal.

VAULTS and VAULT DOORS:

*The Goldie & McCullough Co., Ltd., Galt.

VENTILATING APPLIANCES:

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

*Sheldons, Ltd., Galt.

VENTILATING SYSTEMS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

Gurney Foundry Co., Ltd., Toronto.

VENTILATORS:

*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

*Pedlar People, Ltd., Oshawa, Ont.

VINEGAR

The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.

WAGONS

Tudhope-Anderson Co., Ltd., Orillia, Ont.

WALL BOARD

*Bird & Son, Hamilton, Ont.

WALL COPING

Standard Clay Products, Ltd., St. Johns, Que.

WASHERS:

*The Steel Co. of Canada, Ltd., Hamilton.

WASHERS, plate or wrought
London Rolling Mill Co., Ltd., London, Ont.

WASTES, wool and cotton
Factory Waste and Metal Co., Montreal, Que.

*Seythes & Co., Ltd., Toronto.

WATER-PROOF CEMENT

Benjamin Moore & Co., Ltd., Toronto.

*Paterson Manufacturing Company, Toronto and Montreal.

WAXED PAPER

Business Systems, Ltd., Toronto.

WEBBING, elastic

Hamilton Cotton Co., Hamilton, Ont.

WEBBING, non-elastic

Hamilton Cotton Co., Hamilton, Ont.

WHEELS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

WHEELS, corundum

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, emery

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

WHEELS, propeller, iron and steel

*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, turbine, water.

*Wm. Kennedy & Sons, Ltd., Owen Sound, Ont.

WHEELS, water (impulse type)
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

WELL DRILLING TOOLS AND MACHINERY

Oil Well Supply Co., Ltd., Petrolia, Ont.

WHIPS AND LASHES

Lay Whip Co., Rock Island, Que.

WHISKY

*Hiram Walker & Sons, Ltd., Walkerville, Ont.

WHITE ARSENIC

Coniagas Reduction Co., Ltd., St. Catharines, Ont.

WHITE ENAMEL

*Berry Bros., Ltd., Winnipeg.

WHITE LEAD

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.

WINDMILLS

*Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.

WINDOW SHADES

Daly & Morin, Montreal, Que.

WIRE

*Canada Wire & Iron Goods Co., Hamilton.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
The Graham Nail Works, Toronto.

WIRE CLOTH

*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, feeder and trolley:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRED GLASS:

*Metallic Roofing Co., Ltd., Toronto.

WIRE GUARDS

*Canada Wire & Iron Goods Co., Hamilton.
C. H. Johnston & Sons, Ltd., Montreal, Que.

WIRE, Insulated Electric,

*Northern Electric Co., Limited, Montreal.

WIRE, insulated electric:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE ROPE

The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

WIRE, Weatherproof:

*Northern Electric Co., Limited, Montreal.
*Eugene F. Phillips, Electrical Works, Ltd., Montreal.

WIRE WORK

C. H. Johnson & Sons, Ltd., Montreal, Que.
*Canada Wire & Iron Goods Co., Hamilton.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works Co., Ltd., Toronto.

WOOD

Standard Fuel Co., Toronto.

WOOD PRINTERS

Barchard & Co., Ltd., Toronto.

WOOD PULP, mechanical

La Cie de Pulpe de Chicoutimi, Chicoutimi, Que.

WOOD SPLIT PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

WOOL

*H. V. Andrews, Toronto.

WORSTED COATINGS AND SUITINGS

Rosamond Woollen Co., Almonte, Ont.

WEAPPEERS, book, bottle, etc.

*The Thompson & Norris Co., of Canada, Ltd., Niagara Falls, Ont.

WROUGHT PIPE:

*The Steel Co. of Canada, Ltd., Hamilton.

YARNS, cotton

Hamilton Cotton Co., Hamilton, Ont.

ZINC, electrical

*The Canada Metal Co., Toronto.

* For Display Advertisement See Index Page 523

THE BOOTH-COULTER COPPER & BRASS COMPANY, LTD.

SHEETS TUBES COPPER & BRASS AND RODS

SPECIAL SIZES CUT TO ORDER FROM LARGE STOCK—PROMPT SHIPMENT
115-121 SUMACH STREET TORONTO, CANADA

MADE-IN-CANADA

Toronto, Ontario

Mr. Manufacturer:—

Are you sincere in your desire to boost and make greater the British Empire by the buying of Canadian made goods? If so, look over the following list of high-grade oils, greases, compounds and paints manufactured in our oil refinery at Petrolia and our paint works at Toronto, Ontario. A postal card from you will bring you full information regarding the goods in which you are interested.

CYLINDER OIL**ENGINE OIL****MACHINE OIL****DYNAMO OIL****TANNER'S OIL****BLACK****LEATHER OIL****PARRAFINE****WAX****MINERAL****SOAP STOCK****BENZINE****WHITE LEAD****READY MIXED PAINT****COLORS IN OIL****VARNISHES****BLACK JAPANS****STEEL BRIDGE PAINTS****ROOFING PAINTS****CUP GREASE****LINSEED OIL SOAP**

SERVICE FIRST

"BEATTY"

Material Handling Plant

Has Constant Service built right into it.

We have successfully met the growing demands of the contracting business for Fifty Years, and our reputation is based on the Service idea.

WE MAKE

Hoisting Engines, Dipper Dredges, Clamshell Dredges, Steel Scows, Dump Scows, Drill Boats Steel Derricks, Derrick Irons, Pile Drivers, Centrifugal Pumps and the "FAIVRETTE" CLAM BUCKET.

M. Beatty & Sons, Limited

MAIN OFFICE AND WORKS: Welland, Ont.

TORONTO BRANCH: 4th Floor, 154 Simcoe Street

AGENTS:

H. E. Plant, 1790 St. James St., Montreal
E. Leonard & Sons, St. John, N.B.

Robt. Hamilton & Co., Vancouver, B.C.

Kelley-Powell Limited, McArthur Bldg., Winnipeg

INDUSTRIAL CANADA



"OUR BUSINESS IS PECULIAR"

Soliciting accounts for an advertising agency is most interesting, particularly when one analyses the reasons why some manufacturers and merchants decline to advertise.

The most common "declined with thanks" phrase, so to speak, is—"Our business is peculiar, and does not lend itself to exploitation in the same way that other businesses do."

As if any two businesses are alike! Do you know of any concern in your line, that conducts its affairs precisely as you do? No!

Neither are there any two lines that can, or should be advertised in exactly the same way.

Recently we have been consulted about advertising by

- The Proprietor of a Large Hotel.
- A Mail Order Clothing House.
- A Guarantee Assurance Company.
- A Heavy Machinery Builder.
- A Ladies' Wear House.
- A Builder's Supply House.
- A Musical Instrument Firm.
- A Linen Manufacturer.
- A Fire Extinguisher Manufacturer.

Each a peculiar business!

It is our business to apply knowledge and experience gained in solving advertising problems for hundreds of different lines to the solution of individually peculiar advertising campaigns.

If, for instance, your peculiar, though common problem is getting tangible returns from a comparatively small advertising appropriation, you need the services of an agency such as ours.

J. J. GIBBONS, LIMITED

General Advertising Agents

MONTREAL

Head Office :
TORONTO

WINNIPEG

Cables—Gibjay, Toronto.

Codes—Lieber. ABC 5th Edition

PUBLISHED BY THE CANADIAN
MANUFACTURERS ASSOCIATION INCORPORATED.

HEAD OFFICE BRANCH OFFICES,
• TORONTO • MONTREAL, HAMILTON, WINNIPEG, VANCOUVER, HALIFAX, QUEBEC.

MALLEABLE IRON CASTINGS

The Pratt & Letchworth Company Limited

BRANTFORD ONTARIO

Automobile Parts

Drop Forgings



Sheet Metal Work

General Stampings

Saddle Trees and Saddlery Hardware

WE are now manufacturing these lines for a number of Canadian firms filling war contracts. We are the Pioneers and the largest manufacturers of all steel saddle tree arches in Canada. :: ::

THE DOMINION STAMPING COMPANY
LIMITED

Walkerville, Ont.



"Giving Satisfaction"

This is the true measure of a manufacturer's service to his constituency. It has been our constant aim since we commenced to do business eight years ago. Our large and rapidly expanding trade is proof that our products and our methods of doing business appeal to our customers.

The greatest possible care and attention are given at our Refinery to the manufacture of the different lines—the highest obtainable quality being our goal. The statement "WE MAKE THAT GOOD OIL" has now passed into a proverb as referring to the products of The British American Oil Co.

We guarantee every gallon of British "Peerless" and Motor Gasolene, Benzine, Lamp Oil, Lubricating Oil, "Ford Motor Oil," "Autolene" for other motors, Fuel Oil, Road Oil and other Products.

We are prepared to live up to the guarantee that if any of our goods are not as represented they may be returned at our expense and money will be refunded if already paid for same. In no case will we allow a customer to make a loss on account of our products not being equal to representation.

We make our products as good as we know how and have justifiable confidence in them. Our customers have a right to demand value for their money and we see that they get it. We do not pose as philanthropists; this is pure business.

Our watchword is "GIVING SATISFACTION."

The BRITISH AMERICAN OIL CO., Limited

REFINERS, FOOT OF CHERRY STREET, TORONTO

Head Office: LUMSDEN BUILDING, TORONTO

Branches: MONTREAL, OTTAWA, LONDON, WINDSOR

\$'s ARE \$'s

One spent to accomplish an end is better than spending two seventy-five cents to get the same result.

This is particularly true of union pipe couplings, for, besides money, there is a saving of labor as well.

Dart Unions (and the name is cast on every one) make joints easily which stay tight and never need attention or replacing. The same union may be used repeatedly without additional cost other than the time required.

If you would gain money by saving it, get Dart Unions from your jobber, and you will have the formula. Two for one if they fail.

DART UNION CO., LTD., TORONTO

CONTENTS

	Page
Editorials	645
D. A. Thomas and the Peace River	650
BY NORMAN LAMBERT.	
How the Exchange Situation Affects the Export of Canadian Munitions and Other Manufactures	654
Elections to the Executive Committee	655
Transportation	656
BY J. E. WALSH.	
Insurance	658

	Page
Tariff	659
BY J. R. K. BRISTOL.	
Legislation	662
Winning the Men	665
Methods of Reaching the Men and Reducing Accidents ..	668
BY R. J. YOUNG.	
New Manufacturing Companies	680
Trade Enquiries	682
Among the Industries	688

INDEX TO DISPLAY ADVERTISEMENTS

Albert Mfg. Co. 624
 Andrews, H. V. 675
 Armstrong Whitworth Co., of Canada, Ltd.. 619

Banfield, W. H. & Sons 694
 Beatty, M., & Sons, Limited 706
 Berlin Machine Works 616
 Berry Bros. 623
 Bertram, John, & Sons, Limited 617
 Beveridge Paper Co., Limited 675
 Boeckh Bros. 677
 Boiler Inspection & Insurance Co., Canada. 636
 Boiler Inspection Dept., Ontario Government 692
 Booth-Coulter Copper & Brass Co., Ltd., The 706
 Bradstreets 672
 British American Oil Co., Limited
 Inside front cover.

Brown Bros., Limited 677
 Butterfield & Co. 635

Canada Carbide Co., Limited 631
 Canada Metal Co., Limited 619
 Canada Wire & Iron Goods Co. 623
 Canadian Appraisal Co., Limited, The 679
 Canadian Bank of Commerce 676
 Canadian Billings & Spencer Co., Limited.. 630
 Canadian Bridge Co., Limited 632
 Canadian Car & Foundry Co., Limited 634
 Canadian Consolidated Rubber Co., Limited
 Outside back cover.

Canadian Crocker-Wheeler Co., Limited ... 612
 Canadian Drawn Steel Co., Limited 695
 Canadian Hart Wheels, Limited 680
 Canadian H. W. Johns-Manville Co., Ltd. ... 621
 Canadian Oil Companies, Limited 706
 Canadian Pacific Railway Co. 681

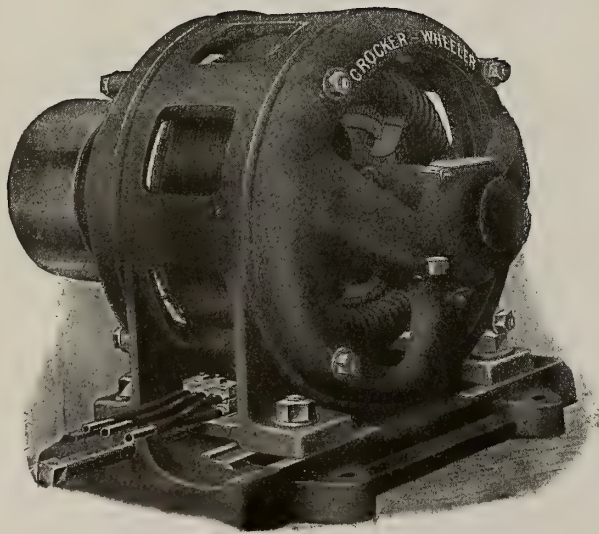
(Continued on next page.)

Canadian Sirocco Co., Limited 638
 Canadian Street Car Advertising Co., Let... 613
 Canadian Tube and Iron Co., Limited 633
 Canadian Westinghouse Co., Limited 643
 Canadian Winkley Co., Limited 692
 Chapman Double Ball Bearing Co., of Canada, Limited 642
 Chicago Bridge & Iron Works 692
 Clarke, A. R., & Co., Limited 624
 Conduits Co., Limited 697
 Consolidated Mining & Smelting Co. of Canada, Limited, The 620
 Dart Union Co., Limited 611
 Delaney and Pettit, Limited 675
 Dennis Wire & Iron Works Co., Limited.. 670
 Dominion Abrasive Wheel Co., Limited 635
 Dominion Belting Co. 672
 Dominion Bridge Co., Limited 632

INDEX TO DISPLAY ADVERTISEMENTS—Continued

Dominion Stamping Co., Limited.....	Inside front cover.	Jeffrey Manufacturing Co.	639	Ontario Government Notices	637
Dominion Steel Foundry Co., Limited.....	675	Jenckes Machine Co., Limited	630	Ontario Wind Engine & Pump Co., Ltd....	639
Dominion Textile Co., Limited	678	Jones, J. L., Engraving Co., Limited.....	697	Otterville Mfg. Co., Limited.....	695
Doon Twines, Limited	686	Jones & Moore Electric Co., Limited.....	619	Page Wire Fence Co., Limited.....	630
Dougall Varnish Co.....	Inside back cover	Jones Underfeed Stoker Co., Limited.....	636	Paterson Mfg. Co., The, Limited.....	644
Du Pont Fakrikoid Co.	631	Kennedy, Wm., & Sons, Ltd.....	633	Penman's Limited	635
Eddy, E. B., Co., The	628	Kerr Engine Co., Limited, The.....	637	Polson Iron Works, Limited.....	636
Edward Partington Paper & Pulp Co.	640	Leonard, E., & Sons	689	Pratt & Letchworth Co., Limited.....	Inside front cover
Elder Dempster & Co., Limited	682	London & Lancashire Fire Insurance Co., Limited.....	694	Purdy, Mansell, Limited	694
Eureka Mineral Wool & Asbestos Co.	637	Lysaght, John Limited.....	Inside back cover	Richards Wilcox Canadian Co., Ltd.....	695
Ford Motor Co. of Canada, Limited	670	Macdonald Mfg. Co.	685	Riordan Paper Co., Limited.....	621
Galt Malleable Iron Co., Limited	689	Martin Corrugated Paper & Box Co., Ltd.	640	Ritchie & Ramsay	627
Gardner, R. & Son, Limited	680	Massey-Harris Co., Limited	625	Rolland Paper Co., Limited, The.....	621
Garlock Packing Co.	626	McClary Mfg. Co.	685	Royal Bank of Canada.....	676
General Fire Equipment Co., Limited.....	696	McKenzie, The D., Machinery Co.....	615	Rudd Paper Box Co., Ltd.....	679
Gibbons, J. J., Limited.....	Outside front cover	McKim, A., Ltd.	684	Russell Motor Car Co., Limited.....	687
Goderich Organ Co., Limited, The.....	695	McLaren, D. K., Limited.....	683	Sadler & Haworth	626
Goldie & McCullough Co., Limited, The....	618	McLaren, J. C., Belting Co., Limited.....	683	Scythes & Company, Ltd.	687
Goodhue, J. L., & Co., Limited.....	683	Meadows, The G. B., Iron & Brass Works Co., Limited	615	Sheldons, Limited	642
Goold, Shapley & Muir Co., Limited.....	677	Metallic Roofing Co., Limited	697	Standard Tube & Fence Co.	674
Gourlay, Winter & Leeming	627	Montreal Cottons, Ltd.	686	Steel Co. of Canada, Limited, The.....	622
Grasselli Chemical Co., Limited	629	Montreal Lithographing Co., Limited.....	637	Structural Steel Co., Limited.....	632
Greening, The B., Wire Co., Limited.....	629	Montreal Locomotive Works, Limited.....	690	Tallman Brass & Metal Co.....	639 and 641
Gutta Percha & Rubber Manufacturing Co. of Toronto, Limited.....	Inside back cover	Morrow, John, Screw & Nut Co., Ltd.....	620	Thomson, Tilley & Johnston	630
Hamilton Bridge Works Co., Limited....	632	Morton, P. Phillips & Co.	672	Thompson & Norris Co. of Canada, Limited	Outside back cover
Hinde & Dauch Paper Co., of Canada, Ltd., The.....	638	National Acme Manufacturing Co., The....	614	Toronto Furniture Co.	691
Howard Smith Paper Mills, Limited.....	639	New Zealand Shipping Co., Limited.....	682	Toronto Hydro-Electric System	663
Imperial Oil Co., Limited	623	Nichols Chemical Co., Limited, The.....	619	Trussed Concrete Steel Co. of Canada, Ltd.	628
Inglis, John, Engine Co., Limited	673	Nicholson File Co.	688	Union Drawn Steel Co., Limited.....	695
International Time Recording Co., Ltd....	666 and 667	Northern Aluminum Co., Limited.....	690	Victor Saw Works, Limited.....	631
		Northern Crane Works, Ltd.....	670	Vogel, H. G., Co. of Canada, Limited	696
		Northern Electric Co., Limited.....	641	Walker, Hiram, & Sons, Limited.....	693
		Nova Scotia Steel & Coal Co., Limited.....	641	Waterous Engine Works Co., Ltd.....	669

FOR BUYERS' GUIDE, SEE PAGE 698.



THE DESIGN OF CROCKER-WHEELER INDUCTION MOTORS

INCLUDES :

Heavy Shafts**Large Journals****High Power Factor****Excellent Efficiency**

They have many other desirable features;
Bulletin 155 describes them.

THE CANADIAN CROCKER-WHEELER CO., Limited

MANUFACTURERS AND ELECTRICAL ENGINEERS

Head Office and Works : St. Catharines

District Offices : Montreal, Toronto, Vancouver

We Have Prepared the Way

WE HAVE SPENT thousands of dollars on Street Car patrons impressing on them the advantages of purchasing "Made-in-Canada" Products.

We were the first in the field with a "Made-in-Canada" campaign, prepared, placed and carried out entirely at our own expense, for the benefit of Canadian Street Car advertisers.

Canadian Manufacturers

who use Street Car advertising get the direct benefit of all the money we have spent, in addition to getting the greatest possible amount of the best advertising for every dollar of their own they spend on Street Car space.

There are 1,735,685 passengers carried daily on the street car lines we control throughout Canada, and with these we have prepared the way for "Made-in-Canada" campaigns.

They are ready to purchase goods made in Canada, but they have to be told what goods are made here.

At a cost of only One Dollar you can reach over 48,000 of these consumers through an advertisement in the Street Cars.

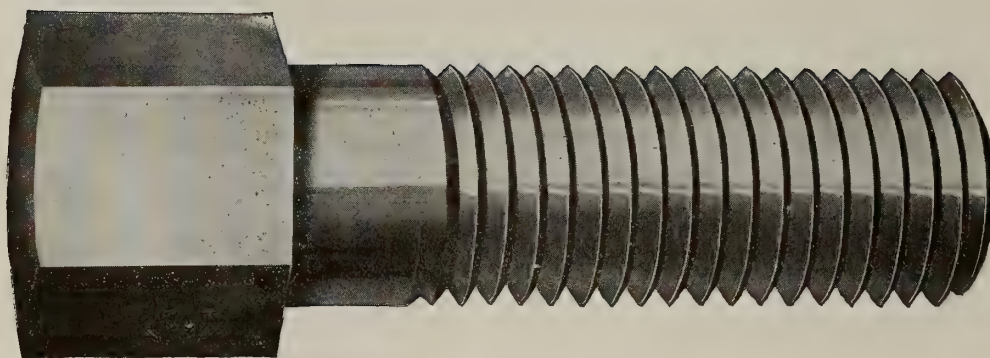
Let us tell you more about it. Any of our offices will respond promptly to a request for information.

The
Canadian Street Car Advertising Company
Limited

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WINNIPEG



BUYERS OF STANDARD SCREW PRODUCTS

Consider these advantages—A complete stock of Canadian made Products at your disposal just when you want them.

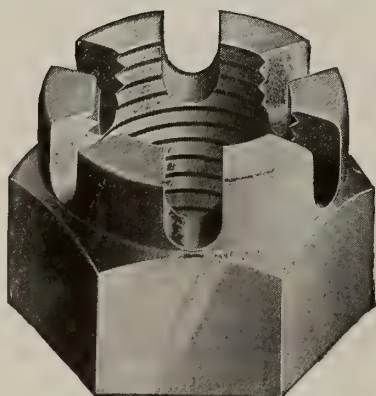
The satisfaction of receiving screws and nuts that are cleanly threaded, accurate and uniform thru out, whether your order calls for one thousand or one hundred thousand.

Eliminate the cut and try of the assembling room—NAMCO products are accurate ready to use from the packing cases.

Specify NAMCO on your next order for Screws, Nuts, Studs. They're carried in stock as follows:—

Cap and Set Screws— V Thread. Nuts—Plain, S.A.E. or V Thread. Nuts— Castellated, S.A.E. Thread. Studs— V Thread, also Hex. Brass Nuts. U.S. and S.A.E. Standard Screws furnished promptly.

Ask for "Milled Products" it's a handy little book for buyers of Screws and Nuts



Estimates furnished from samples or blue prints on Screw Machine work up to 2¼ in. diameter,—10½ in. long.

THE NATIONAL-ACME MANUFACTURING CO.

MONTREAL, P.Q.

De Courcelles St. and G.T.R.

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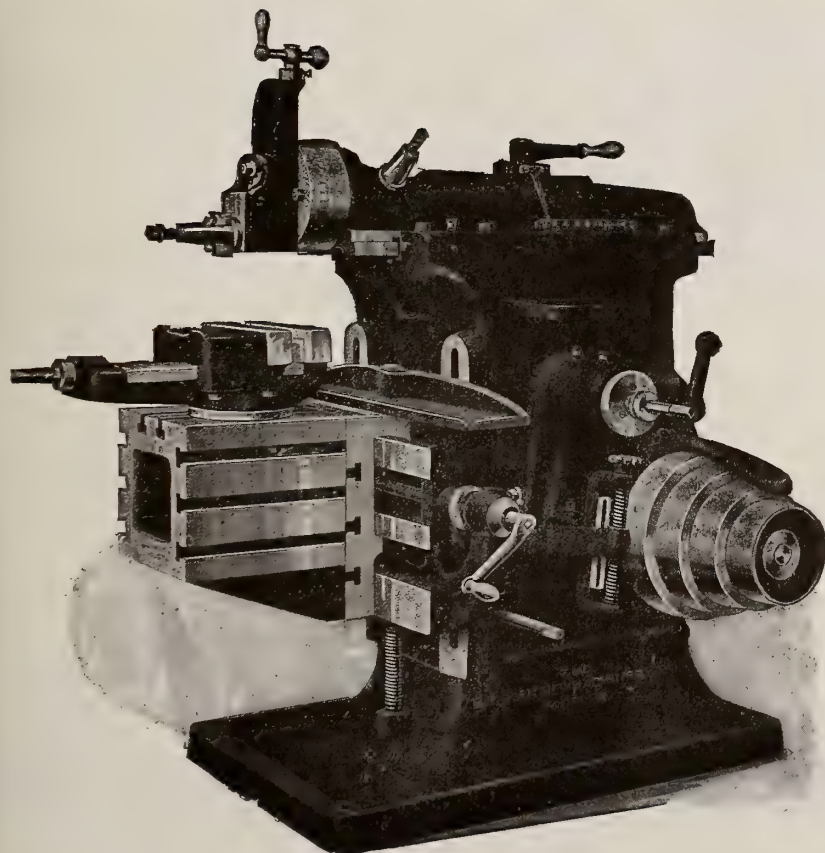
FACTORY EQUIPMENT



STEEL Tables, Stools, Benches, Lockers
Bins, Shelving, Chutes

WIRE Baskets, Window Guards, Partitions
Machine Guards, Fencing

The GEO. B. MEADOWS, Toronto Wire, Iron and Brass Works Co., Limited
479 WELLINGTON ST. WEST, TORONTO, CANADA



SHAPER

ARE you working without this
15-inch back geared crank
shaper?

If so, you are losing money because
you are not getting the highest
possible degree of efficiency.

Write for Descriptive Leaflet

**The
D. McKenzie Machinery
Company**

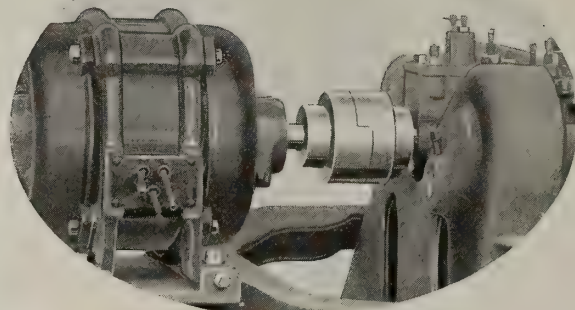
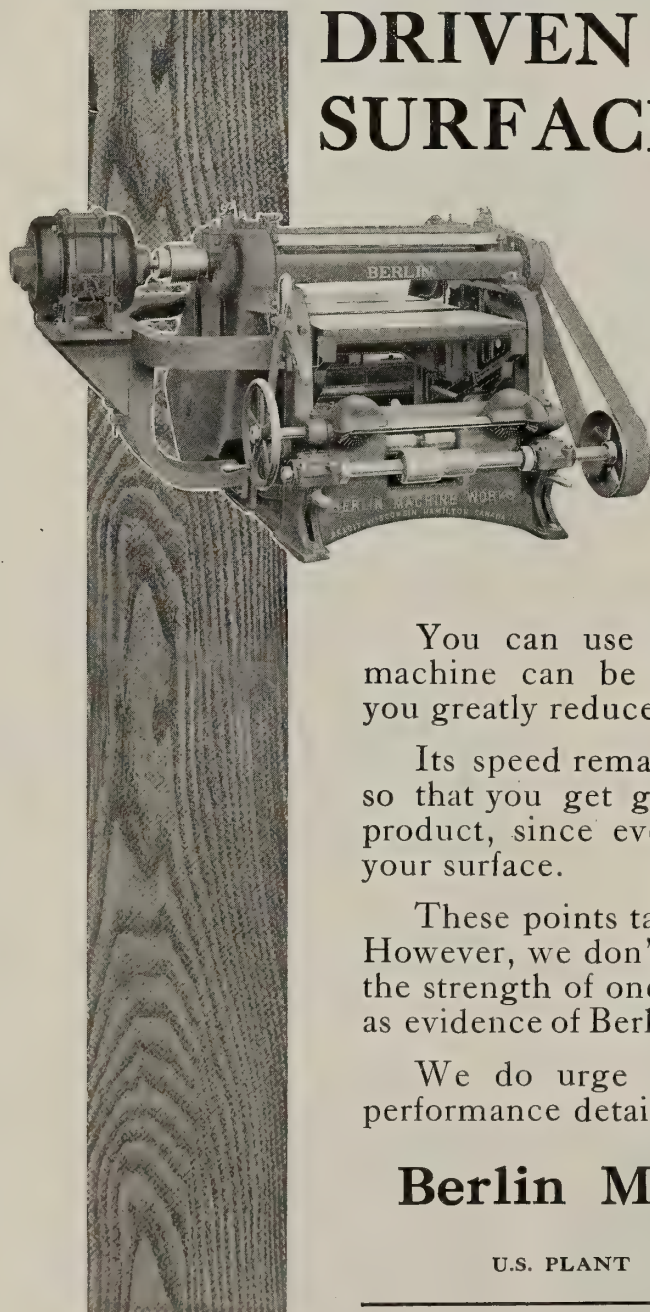
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ONTARIO

THE COUPLING

Is Direct from Motor to Cylinder on the

BERLIN MOTOR-DRIVEN SURFACER



Bringing power and machine together, cutting out those wasteful middlemen—shafting and belting, so that you get a clear overhead, better light, greater operative safety, and diminished fire risk.

The machine consumes power only when in use—you are not spending money in turning idle shafting,—wasting power you pay for.

You can use floor space to better advantage, as each machine can be placed just where you want it, so that you greatly reduce the time and cost of handling lumber.

Its speed remains constant as there is no belt slippage—so that you get greater production and a better quality of product, since every change in speed means a variation in your surface.

These points taken together earn greater profits for you. However, we don't urge you to install the No. 156 merely on the strength of one feature. We mention motor drive simply as evidence of Berlin Surfacers adaptability to modern demands.

We do urge you though to get the construction and performance details by writing—

Berlin Machine Works, Limited

HAMILTON, ONTARIO

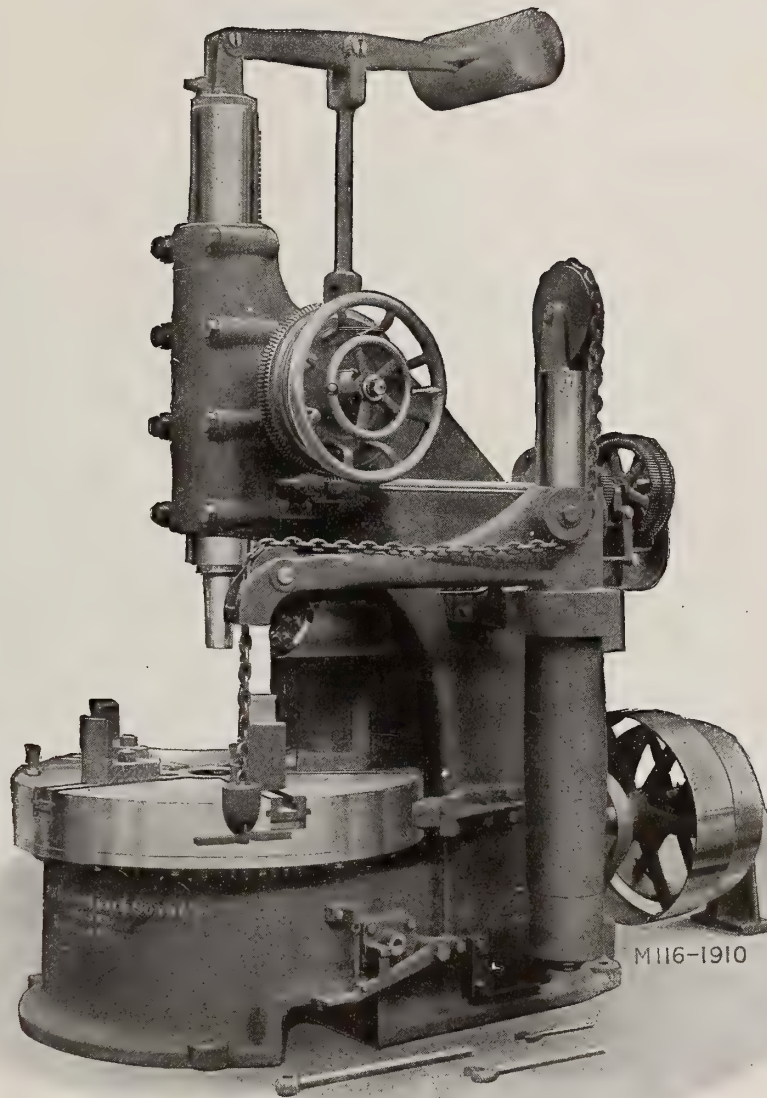
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SINGLE OR DOUBLE SURFACERS FOR EVERY PURPOSE



BERTRAM MACHINE TOOLS



42" CAR WHEEL BORER EQUIPPED WITH AIR
HOIST FOR WHEELS

We Manufacture a Full Line of Locomotive and
Car Shop Machinery

THE JOHN BERTRAM & SONS CO., Limited

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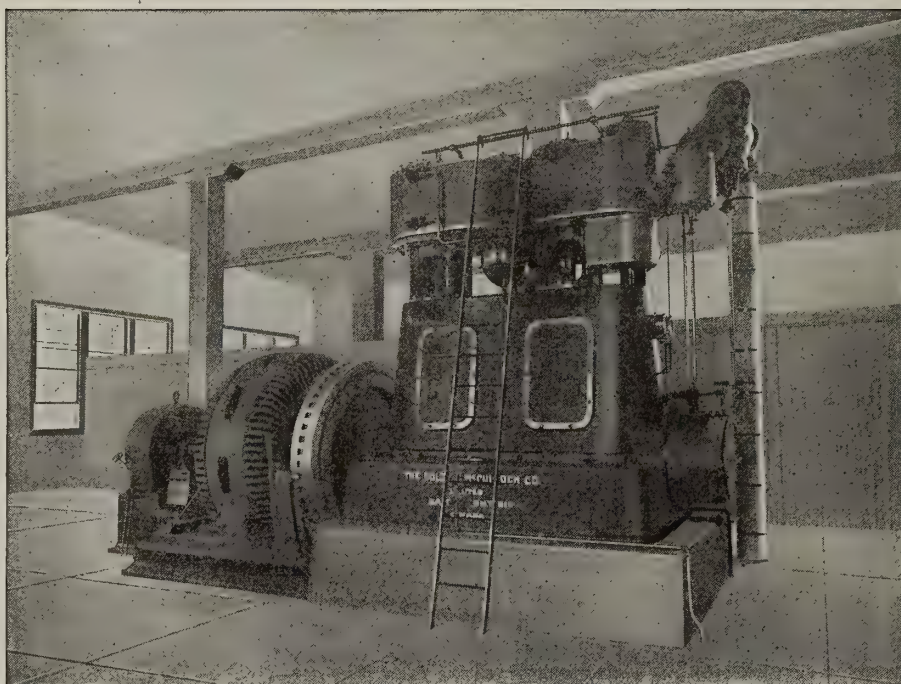
WINNIPEG

609 Bank of Ottawa Building

POWER EQUIPMENT

Engines, Boilers, Heaters, Tanks, Pumps, Condensers and Transmission Machinery, Designed by Experts to Give the Highest Possible Efficiency

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Showing a large Two Cyl. Compound, Vertical Enclosed, Forced Lubrication Steam Engine of 300 k.w. capacity, built and installed by us for THE ONTARIO MALLEABLE IRON CO., at OSHAWA, ONT.

G. & McC. Co. Vertical Steam Engines

have been installed in over Fifty Canadian Power Plants in less than three years which speaks well for the reception given this engine by the Engineering Profession and manufacturers in general. They are giving excellent service to their owners.

These Engines are fully illustrated and described in our New Catalogue No. 34, a copy of which is yours for the asking.

The Goldie & McCulloch Co., Limited

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BRITISH COLUMBIA AGENTS:

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THE NICHOLS CHEMICAL COMPANY, LIMITED

MANUFACTURING CHEMISTS

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Branch Office—120 Mill Street, Toronto

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Muriatic Acid
Nitric Acid
Hydrofluoric Acid
Mixed Acid

Sulphate Soda
Sulphide Soda
Hypo-Sulphite Soda
Bi-Sulphite Soda
Phosphate Soda

Glauber's Salt
Blue Vitriol
Sulphate Alumina
Papermaker's Alum
Caustic Soda

Bleaching Powder
Tri-Sodium Phosphate
Ammonia
Salt Cake
Tin Crystals

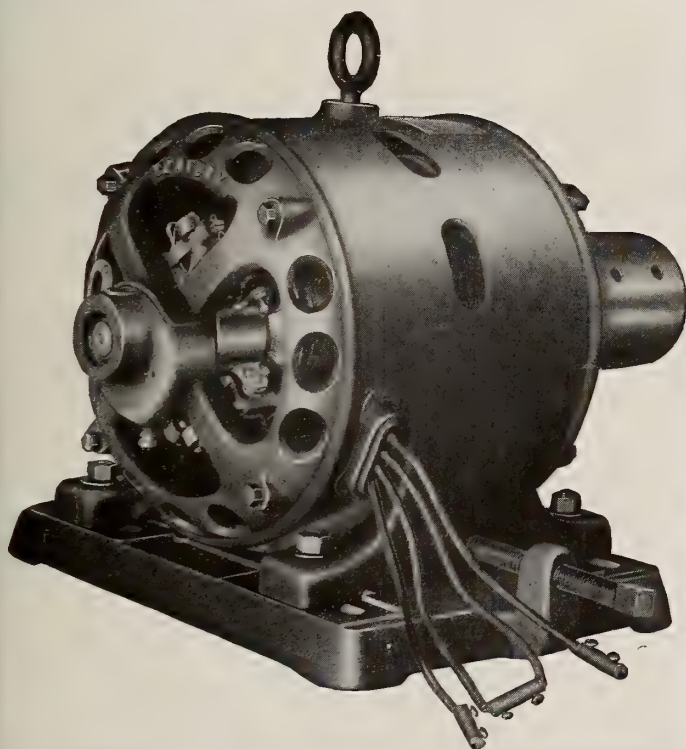
Agents for Baker & Adamson's Chemically Pure Acids and Chemicals
AGENTS FOR CANADIAN SALT CO.—"WINDSOR" BRAND CAUSTIC SODA & BLEACHING POWDER

Jones & Moore Electric Co.

LIMITED

294-300 Adelaide St. W.

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MANUFACTURERS OF DYNAMOS AND MOTORS
REPAIRS PROMPTLY PERFORMED

The Canada Metal Co., Limited

Manufacture in Canada

Our
Babbitt
Metals
Give
Excel-
lent
Service



We
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Proud
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Goods
We
Manu-
acture

FOR GENERAL MACHINERY BEARINGS
TRY

Harris Heavy Pressure

THE BABBITT METAL WITHOUT A FAULT

WE HAVE EVERYTHING IN METALS

Ask for Our New Catalogue. Mailed FREE on Request

THE CANADA METAL CO., LIMITED

Head Office and Factory, Toronto Branch Factories, Montreal, Winnipeg

ARMSTRONG WHITWORTH OF CANADA — LIMITED —

MANUFACTURERS OF CELEBRATED BRANDS OF

HIGH SPEED STEEL & DRILLS

"AW" FOR CUTTING ALL METALS
— AT HIGH SPEEDS

FOR HARD METALS — "TYR"
RAILWAY & TRAM TYRES

OFFICE 22 VICTORIA SQ. MONTREAL — WORKS LONGUEUIL QUE.

MORROW Products are Unconditionally Guaranteed

MORROW Products are Best by Actual Tests

Set Screws

Cap Screws

Cold Pressed Nuts

Twist Drills

*To be had from the largest and most responsible
Jobbing Houses from Coast to Coast*

John Morrow Screw & Nut Co., Limited

INGERSOLL - - - CANADA

MORROW DRILLS EXCEL IN EFFICIENCY

MORROW DRILLS ARE MADE IN CANADA

THE CONSOLIDATED MINING AND SMELTING CO. OF CANADA, LIMITED

BUSINESS OFFICE AND WORKS: TRAIL, BRITISH COLUMBIA

SMELTERS AND REFINERS

Purchasers of all Classes of Ores

Producers of

TRAIL BRAND PIG LEAD

Eastern Agents: Thomas Robertson & Co., Limited, Montreal

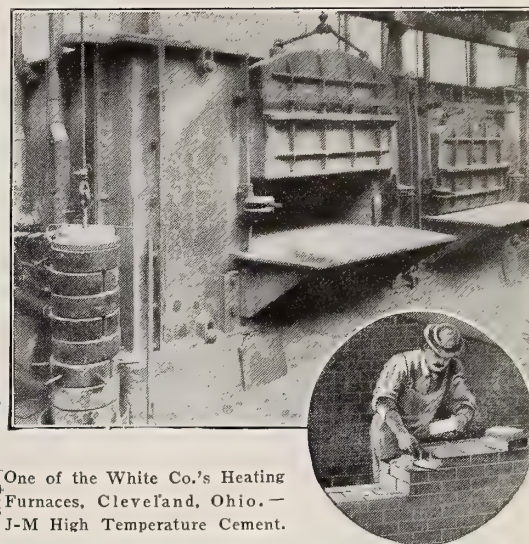
J-M Products are not only the result of experience and expert workmanship on materials of the highest grade, but have behind them the backing of J-M Service and Responsibility. They must give absolute satisfaction in service.

J-M High Temperature Cement—Better than Fire Clay —Makes the brick last longer.

The next time you shut down one of your boilers to build a new setting, take a good look at it. If the joints between fire brick have been eaten into so that the edges of the brick, as well as the faces, are exposed, your fire clay has gone back on you. J-M High Temperature Cement won't act this way, and it will correct your trouble; it will save the expense of shutting down and the loss of time in frequent setting renewals.

No. 31 J-M High Temperature Cement is made from highly refractory materials that seal the uneven surfaces between the bricks, protect the edges from the action of the flame up to 3100° F., thereby preventing the brick from being subjected to a "soaking" heat, which causes unequal expansion and contraction, spalling and disintegration. When once you have used No. 31 High Temperature Cement for setting your fire brick you will always carry a supply on hand. It can also be used for patching and door jambs.

**THE CANADIAN
H. W. JOHNS-MANVILLE CO., LIMITED**
TORONTO MONTREAL WINNIPEG VANCOUVER



One of the White Co.'s Heating
Furnaces, Cleveland, Ohio.—
J-M High Temperature Cement.

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LARGE VARIETY BUILDING PAPERS

Can be shipped from stock
on hand at Merritton.—Grey,
Blue, White, Brown, also Haw-
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For your next supply of Letterheads,
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Leaf Ledgers, etc.

Ask your Printer to show you our
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ger Papers. It is the most complete.
It contains a paper for every use.

If you are looking for 100% value and
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will supply them. Samples on request.

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St. Jerome and
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Our Sacred Duty

To contribute to a Fund for the relief of the unemployed does not discharge or liquidate the duty we owe to the brave men who are sacrificing their lives in the Trenches that we may live and enjoy the Blessings of Liberty and Happiness.

Better by far that we extend our Charity in an effort to use in our Mills, our Factories, in our Cities and our Homes all over this fair land, the products that Canadian labor produces, so that when the Boys come marching Home, they will be welcomed back to a Prosperous and Happy Canada.

Their sacrifice is worthy of our greatest effort—Our Duty is Plain; Canada with Canadian Labor and Capital can produce, manufacture and distribute, products sufficient to keep the Wheels of Industry Turning to the limit. The song of Prosperity and Happiness should ring out all over the land.

Let us sincerely pledge, to the extent of our needs, to purchase materials produced in Canada by Canadian Workmen, and the result of our efforts will return to us the Blessings of a Prosperous and Happy Nation.

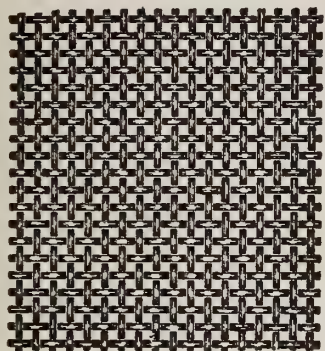
The Steel Company of Canada, Limited

Hamilton - Toronto - Montreal - Winnipeg



Canada Wire & Iron Goods Co.

HAMILTON - - CANADA



Manufacturers of
Double Crimped
Wire Cloth and
Wire Screening
for all purposes of
Iron, Brass, Copper,
Bronze, Galvanized
and Tinned Wire,
etc.

There is no kind of Wire Fabric required in the production of any machine or manufactured article that we cannot furnish.

We also manufacture:—

Bank and Office Grilles and Ornamental Iron
Work in all finishes.

Wire Guards for Factory Windows, Moulders'
Riddles, Laboratory Testing Sieves, Steel
Factory Stools and Metal Lockers.

Send for Catalogue — Enquiries Solicited

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Correct lubrication for
your motor is as neces-
sary as proper food
for your body.

Don't wear out your
motor by using the
wrong oil.

Polarine assures freedom from breakdowns
and easy motoring under all conditions of
load and temperature.

The Imperial Oil Co., Limited

TORONTO WINNIPEG MONTREAL
ST. JOHN HALIFAX

SERVICE



PERFECT VARNISH SERVICE

means the right varnish for
the right use, for the right
price.

The lack of any of these quali-
fications increases the finishing
room overhead unnecessarily.

When we know the consumers' require-
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for every need.

Our made in Canada varnishes have an
earned reputation of nearly 60 years.

Get in touch with us.

BERRY BROTHERS

(INCORPORATED)
World's Largest Varnish Makers

Established 1858

(143)

WALKERVILLE, ONT.

BERRY BROTHERS VARNISHES



ALWAYS USE
Hammer Brand Plaster of Paris

Manufactured for Half a Century—the Standard of Excellence



Try it and Compare
 Its Surface Covering Capacity
 With Other Brands

MANUFACTURED SOLELY BY

ALBERT MANUFACTURING CO.
 Hillsborough, New Brunswick, Canada

EXPORT AGENTS: THE IMPERIAL EXPORT CO., LIMITED

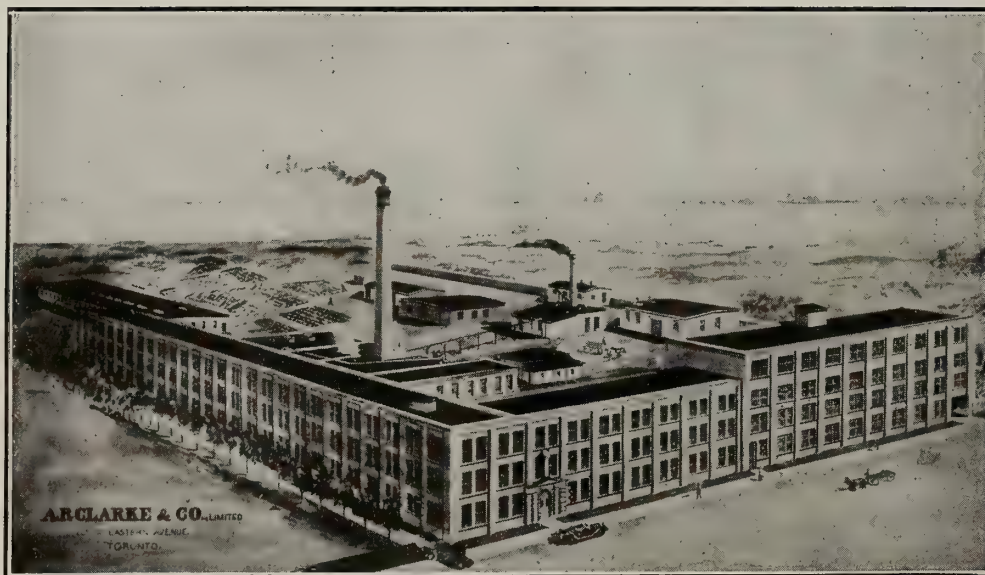
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 17 Queen St.

SYDNEY
 Martin's Chambers, Moore St.

AUCKLAND
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CHRISTCHURCH
 ————St.

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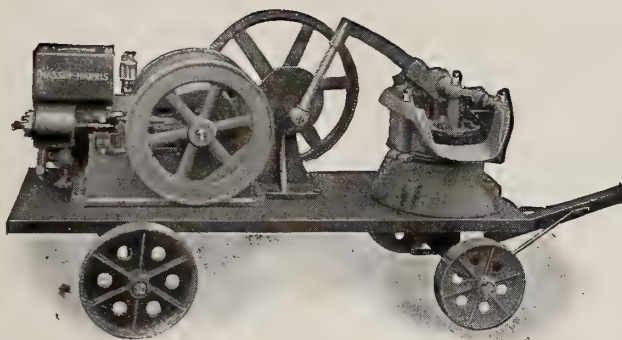
The Largest Patent Leather Manufacturers
 in the British Empire

A. R. CLARKE & CO., LIMITED

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TORONTO

QUEBEC



Helps for the Contractor

When you need a pump to take the water out of an excavation, or to furnish a supply of water, get a

MASSEY-HARRIS Direct-Connected Pump

consisting of a Massey-Harris Gasoline Engine, geared to a Goulds Diaphragm Suction Pump, or a Goulds Plunger Pump, stationary or mounted on a hand-truck.

If in need of a hoist, get a

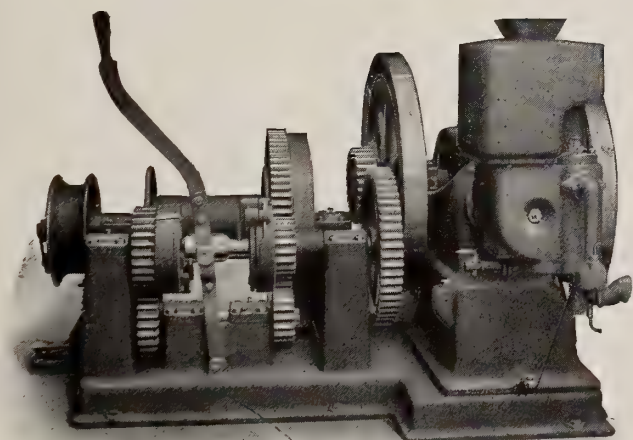
MASSEY-HARRIS Direct-Connected Hoist

Powerful—Safe—Easily Handled.

MASSEY-HARRIS CO., LIMITED

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At any of these branches
you can buy our

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AND

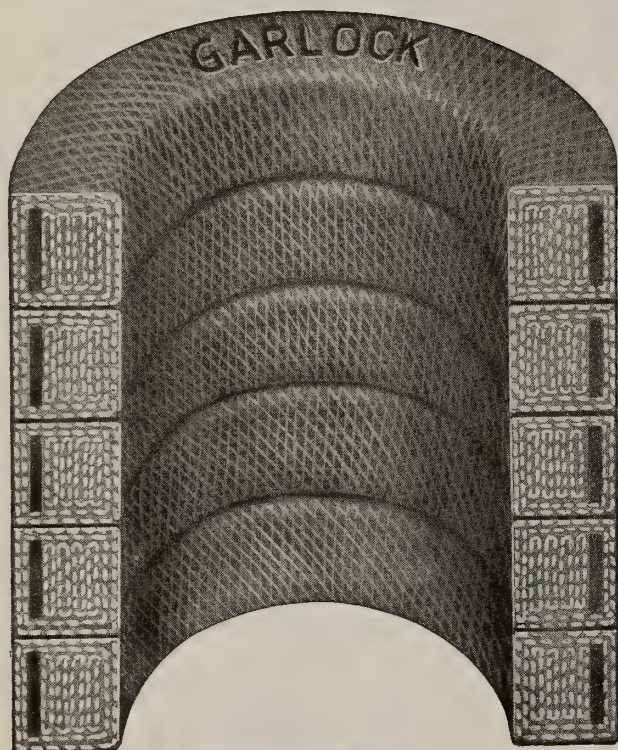
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Try either or both and you
will not be disappointed

Garlock High Pressure Piston Rod Packing



STYLE No. 200.

IS built up on a core consisting of several flattened tubes.

The tubes are braided from the highest grade of asbestos yarn, and are cemented together with the best rubber friction.

The tubes are cemented only on the outside, therefore the packing is lighter per linear foot than other types of high pressure packing.

In service the tubes open under pressure and expand the packing against the piston rod.

The core of flattened tubes is backed with a cushion of high-grade rubber, so compounded as to retain its resiliency under heat.

The tube-core and rubber cushion are covered with cloth woven from the highest grade of long fibre asbestos.

Our high pressure packing is not merely smeared on the outside with graphite and grease.

Every fibre of it is saturated with a specially prepared lubricant, which does not affect the rubber cushion or friction.

The outside of the packing is coated with the best grade of floating stock graphite.

The best materials we can buy are used in the manufacture of our high pressure packing.

It is built up in rectangular form and uniform shape and exact sizes are thereby obtained.

Asbestos packing, which is rolled around a rubber core and afterwards distorted by running through a square die, does not retain its shape or size.

Our high pressure packing is made by experts who have done nothing else for years but make that one type of packing.

The length of service obtained from it is greater than that secured from other makes, therefore the labor cost of applying and adjusting is less.

Our packings are sold at net weights; weights of tubes and boxes are not included.

Every pound of our high pressure packing carries with it the Garlock guarantee of satisfactory and economical service.

We will promptly replace or refund the cost of any of our packings which may prove unsatisfactory to our customers.

THE GARLOCK PACKING COMPANY
HAMILTON, ONTARIO

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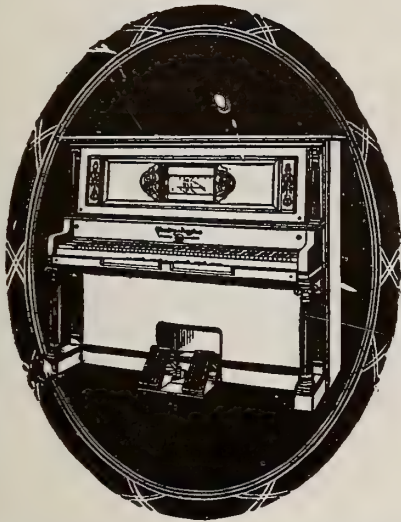
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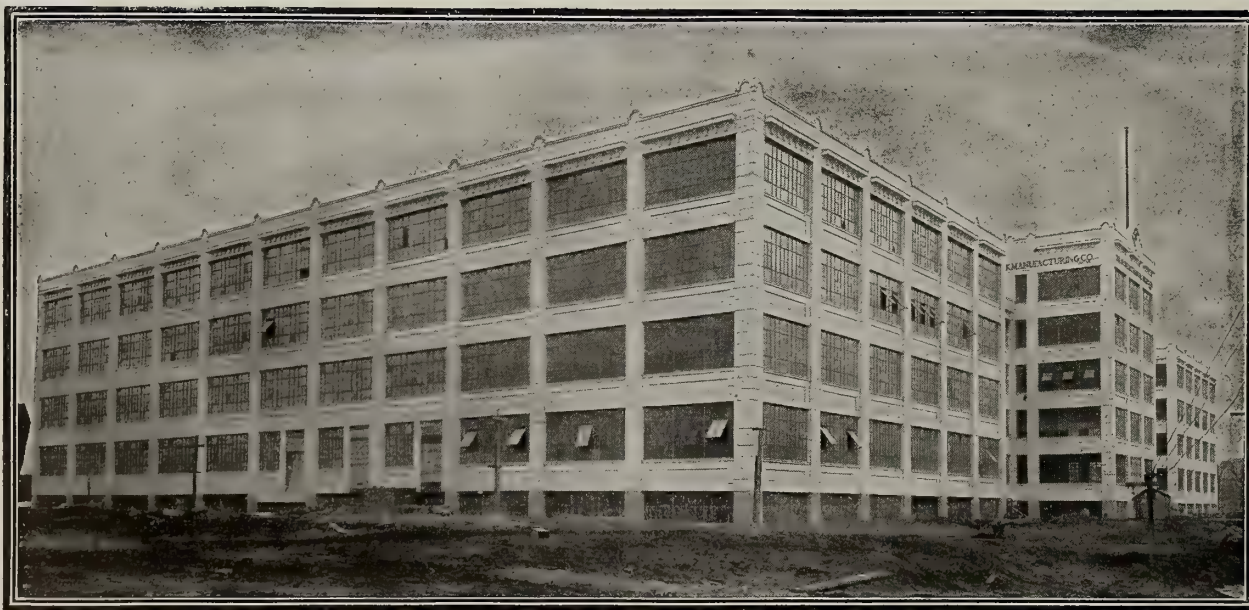
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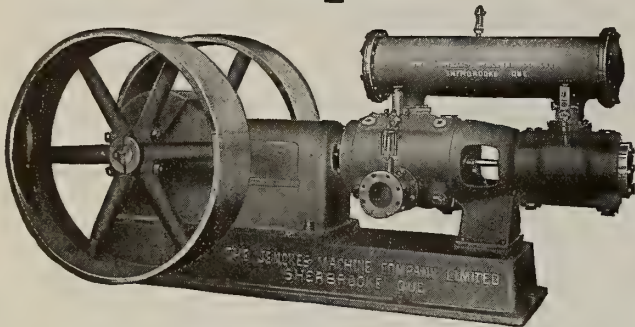
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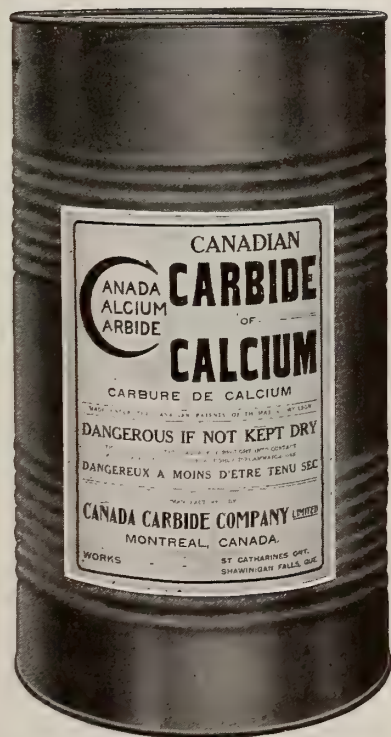
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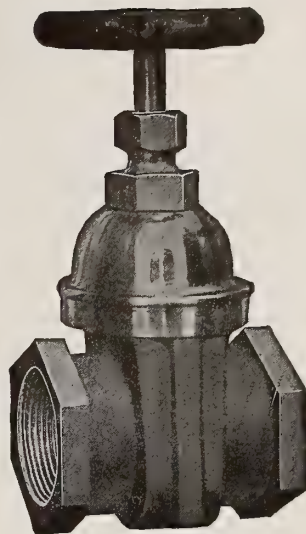
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Everyone operating a HOISTING steam plant working at a pressure of 20 pounds or over irrespective of horse power, and used for hoisting in structural operations or excavating purposes in the Province of Ontario, must hold a Hoisting Engineer's Certificate from the Board of Stationary and Hoisting Engineers. Anyone operating such a plant without a Certificate is liable to the penalties set forth in the Stationary and Hoisting Engineers' Act.

Application forms for obtaining STATIONARY or HOISTING Engineers' Certificates, may be had upon applying to the Chairman.

Hon. JAS. S. DUFF,
Minister of Agriculture.

W. C. McGHIE,
Chairman of Board.

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H. A. OLARK, 432 Woodman Avenue, London.
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Persons having business with any of the Inspectors will find them at the above address. HON. JAS. S. DUFF, Minister of Agriculture. Phone Main 5800.

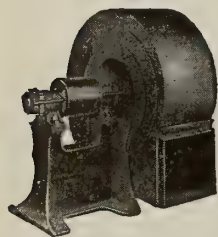
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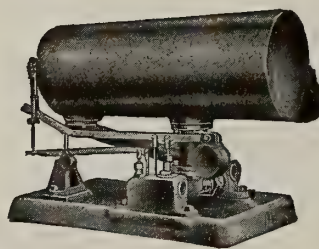
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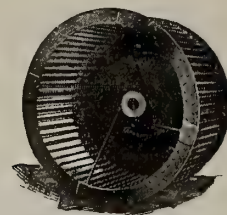
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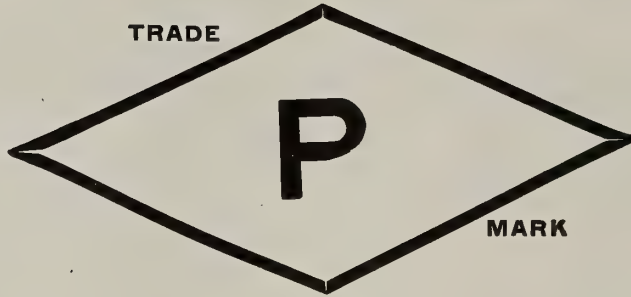
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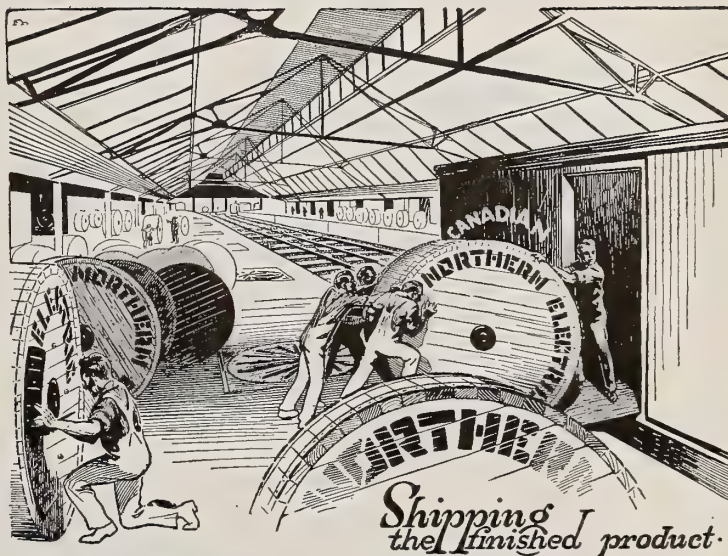


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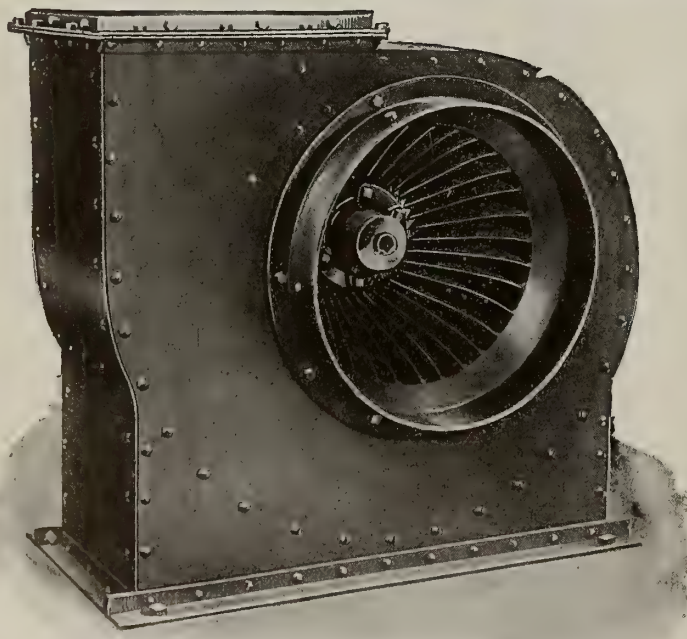
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Keith Fans

For Heating and Ventilating

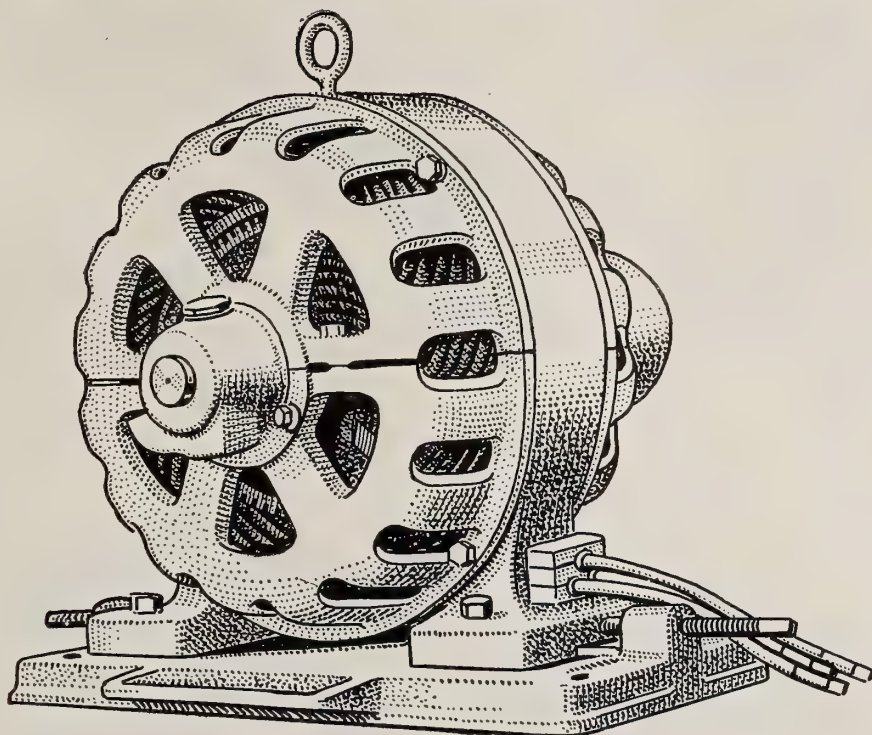
When it comes to a question of Heating and Ventilating the Factory, Church, School or Public Building, it is imperative that you should select the best and most approved system. The "**Keith**" Fan is specially distinguished for giving greater volume with less power than any other Fan made. Get our Keith Fan Catalogue No. 55 and judge for yourself.

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Made in Canada



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It is covered with a Barrett Specification Roof.

Now that the roof is completed it will not be necessary for the authorities to give any further thought to it for twenty years or more. It will require no painting, no repairs, no maintenance cost of any kind.

These roofs take the base rate of insurance and are approved by the Underwriters' Laboratories.

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To be sure of getting a Barrett Specification Roof on your building, send to our nearest office for a copy of The Barrett Specification with diagrams and *incorporate same in your building plans.*

We should like to send every architect, engineer and building owner a copy of the Underwriters' Laboratories report on Barrett Specification Roofs. Address our nearest office.

Special Note

We advise incorporating in plans the full wording of The Barrett Specification in order to avoid any misunderstanding. If any abbreviated form is desired, however, the following is suggested:

ROOFING—Shall be a Barrett Specification Roof laid as directed in printed Specification, revised August 15, 1911, using the materials specified and subject to the inspection requirement.

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INDUSTRIAL CANADA

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INDUSTRIAL CANADA

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New Canadian Manufactures.

THE variety and volume of the munitions of war which are being produced in the factories of Canada form a striking tribute to the enterprise and energy of our manufacturers. Scores of companies are engaged in making shells, in many cases after remodelling, enlarging or building plants. For this work much new machinery was needed of a type which had not been previously manufactured in this country, and which is now being successfully made in great quantities. A number of firms are making cartridge cases, others are making shell machining saws, shell finishing equipment, shell baking varnish. At least eight firms are busy making cordite, T.N.T. and other explosives. Several firms are making bayonets, others are turning out bits, spurs, saddle arches and trees, saddlery and harness for cavalry. All kinds of military packing boxes and ammunition boxes are being produced. Great orders are being executed for mess tins, travelling kitchens and cooking utensils. Many firms are making small arms ammunition and scores are busy on such articles as bags, cloth, knitted goods, sheep-lined coats and wagons. The chemical companies are very busy supplying

articles needed for the medical corps and ammunition makers.

But it is not only in producing war munitions that Canadian manufacturers have made progress since the outbreak of the war. Foreign trade was seriously disturbed and many articles which were previously imported could not be had; and, consequently, our manufacturers turned their attention to the possibility of substituting Canadian-made articles for those which had been bought abroad. Among these articles which are now being made in Canada are the following: High carbon steel, manganese steel; molybdenum; zinc; steel drums; pyrometers; detachable chain and chain belting; drawn tungsten wire; accumulators; milking machines; wire weaving machinery; sand blasts; automatic wrapping machinery; aluminum lasts; toys of metal and wood; wire tag fasteners; wire collar supports; light metal wares, such as clips and buttons; fancy pencil movements; lamp lenses; window glass; glass syphon vases; potash; cyanides; ether; amyl acetate; reclaimed rubber; oxygen and hydrogen; acid resisting varnish; medical specifics; tonic wine; grape juice; bakers' and confectioners' malt supplies; parchmentine and glassine paper; hollow turned wood boxes.

A third field in which Canadian manufacturers have made progress is in increasing the production of goods used mainly for regular industrial purposes which have been manufactured in Canada for some years.

The following outputs have been increased either by the establishment of new companies or the greater activities of old companies: Pulp and paper; leather; sugar; chains; woodenware; tungsten lamps; enameled ware; wood distillation products; abrasives; electro metals; carbon electrodes; carbide; ice and refrigerating machinery; augers and bits; casters; drapery hardware; office supplies; paste and toilet preparations.

The above shows that Canadian manufacturers are doing their best to regain the ground lost during the depression which followed the boom of 1910-11-12 by adapting their industrial equipment to meet changed conditions. Our national manufacturing plant was overspecialized on construction work. When railroad, town and other building operations came to a standstill manufacturers suffered; but it is gratifying to notice that the whole system is being readjusted to obtain new business in place of that which has been lost.

The War Budget in Britain.

THE war budget recently brought down in the Imperial House of Commons by Chancellor McKenna imposes a 33 1/3 per cent. customs duty on motor cars, bicycles, picture films, clocks, matches, musical instruments, plate glass and hats; and increases the duty on sugar from 44 cents to \$2.24 per hundredweight; on tea, coffee, chicory, tobacco and dried fruits, 20 per cent., and on patent medicines, 100 per cent.

In order to avoid a fiscal controversy between the supporters of the doctrine of Free Trade and the supporters of Protection, Mr. McKenna was careful to state that the tariff increases were for revenue purposes only.

However, increases of duty, running from 33 1/3 per cent. to 100 per cent., not only raise revenue, but also furnish protection to the industries affected. It seems highly probable that further duties must be imposed upon imports into the United Kingdom in order to raise revenue to meet the staggering war charges—and it appears inevitable that such duties will bring with them a measure of protection. How far this procedure will undermine the British policy of Free Trade remains to be seen, but the opinion is growing that British manufacturers will need a preference in their home market in order to meet the heavy taxes now being laid upon them and also to continue their export trade after the war.

Canadian Trade.

OUR imports have decreased by forty million dollars during the last five months, as compared with the same period last year.

Our exports have increased by fifty million dollars during the last five months, as compared with the same period last year.

During the first five months of the present fiscal year, our exports have exceeded our imports by twenty-five million dollars. In the same period our total trade (imports for consumption and domestic exports) has increased by eleven millions.

This is a great change from our reckless days when we bought abroad annually three hundred million dollars more than we sold.

The Crops.

WE can breathe freely at last. The crops are harvested.

Crop questions are now reduced to three: How many bushels? Can we get them to market? What will be the selling price?

According to the official Government records, this year's crops surpass all previous records. Wheat, as the following figures show, has made an immense increase:

Year.	Total Canadian Wheat Crop.
1915	308,839,800
1914	161,280,000
1913	231,717,000
1910-14 (average)	196,026,000

Perhaps it will be found that the official estimates are a trifle generous.

The annual estimates of the *Manitoba Free Press*, and the *Toronto Globe* are considered to be reasonably accurate and both are much more conservative than the official forecast. The contrast is shown in the following statistics, which include only the provinces of Manitoba, Saskatchewan and Alberta.

	Government Estimate.	Manitoba Press Est.	Toronto Globe Est.	Last Year's Yield.
Wheat	275,772,200	222,184,071	226,359,000	140,958,000
Oats	301,051,000	253,392,375	250,000,000	150,843,000
Barley	33,303,000	54,044,138	51,964,000	19,535,000
Flax	12,118,000	6,645,370	7,624,000	7,083,000

Estimates are open to great variations, but this much seems to be clear—the 1915 crop, taken as a whole, exceeds by a good margin all previous crops.

The Death of Sir William Van Horne.

A NUMBER of Canadian manufacturers will recall with pleasure their visit to the farm of Sir William Van Horne while the excursion train, carrying delegates to the Annual Convention at Halifax in 1913, stopped a few hours at St. Andrews, N.B. Remembering the kindly man who seemed to take so much pleasure in entertaining his guests, and his buoyant spirits on that occasion, the news of his death, following a period of great suffering, intensified the regret with which the intelligence was received. He was one of those men who seem to come to nations in time of need, a great builder, a member of that group which made the constructive history of this country.

The Agricultural Commission.

A RECENT Order-in-Council issued by the Dominion Government provides for the appointment of a Commission to investigate agricultural problems. The personnel of this commission has not yet been announced. This action of the Government is a result of the conference held in Winnipeg last November between representatives of the Western grain growers and manufacturers, after which a joint memorandum was prepared asking for the appointment of the commission. It is gratifying to see that, not only have the manufacturers and farmers decided to forget their differences, but that they have also been able to combine in advocating a common policy which is apparently sound enough to recommend itself to the Dominion Government. This much has been accomplished but the ultimate benefit which will be derived will be determined by the character of the men who are appointed to the commission. We trust that these appointments will not be conferred as rewards for professional politicians but will be given to men who understand agricultural conditions and who are willing to devote unlimited time and energy to the problems before them.

Made-in-Canada and the Press.

THE Made-in-Canada campaign in its relation to publishers was discussed at the Annual Meeting of the Canadian Press Association which was held in Toronto in September.

The newspaper proprietors and editors present were almost unanimously in favor of the Made-in-Canada idea. This is not surprising, as it does not require much argument to convince the proprietor of a newspaper in a town that has grown during the last decade, say from 2,000 to 10,000 as the result of the establishment of factories within its boundaries, bringing with them subscribers and advertisers for his journal. The welfare of the publishing industry is intimately connected with and depends on the progress and stability of other industries. Some dissatisfaction was expressed because a great number of publications, such as trade papers, financial papers, religious papers, small town weeklies and weeklies using patent insides were not given part of the campaign advertising. The explanation of this omission should appeal to all reasonable publishers. The committee had limited funds at their disposal and wished to get quick results; consequently, out of 144 publications which were selected 124 were daily papers or weekly editions of daily papers. The committee no doubt would have preferred to spend money for advertising purposes in all the publications issued in Canada but lack of funds prevented their doing so. The members of the Canadian Press Association deserve and have received the thanks of Canadian manufacturers for the whole-hearted and very effective support which they gave and are still giving to the Made-in-Canada policy.

When the newspapers, with splendid unanimity, took up the Made-in-Canada cry, supported it vigorously and put it into practice, they performed a distinct national service and in addition benefited themselves, and according to the degree which they continue their support will the welfare of the country and their own interest be assured.

After this war the United States will perhaps be the richest country in the world. That means that Canada will have along the 4,000 mile boundary a number of competing industrial centres which will have immense supplies of money, huge organizations and great numbers of skilled employees. At the present time the chemists and technical experts of the United States are using their utmost ingenuity to perfect devices and processes which they hope will make their country the leading manufacturing nation of the world, and it is with their powerful neighbor that we must compete. In the coming industrial battle Canadian manufacturers will have to fight geography, they will be handicapped by lack of capital and in almost every way they will be placed at a disadvantage with manufacturing firms of the United States. Consequently, is it not of supreme importance that the Made-in-Canada campaign should be supported vigorously?

In the last nine months the value of the goods imported into Canada for consumption was \$303,000,000. For a similar period of the preceding year, the value of goods

imported into Canada for consumption was \$398,000,000. Consequently, since the Made-in-Canada campaign was started, our purchases abroad have diminished by \$95,000,000 and it is reasonable to claim that the Made-in-Canada campaign is responsible for at least a part of this decrease.

The New C. N. R. Transcontinental.

SIR WILLIAM MacKENZIE has announced that the new Canadian Northern line between Toronto and Vancouver will be ready for freight and passenger traffic in October.

The completion of a third transcontinental line will increase transportation facilities for Canadian manufacturers, who are among the largest shippers and receivers of freight. The construction of the Canadian Northern Transcontinental has been completed only after surmounting innumerable physical and financial difficulties, and it is apparent that the question of profitable operation is perhaps the greatest problem which the company has yet faced. Canadian manufacturers hope that the operation and management of the new line will be conducted with the same energy and resourcefulness which characterized its construction.

Ocean Freight Rates.

NOW that their wheat is ready for the export market, farmers, especially those in Western Canada, realize the unfavorable situation of ocean freight rates, and bitter complaints are appearing in the farm press.

Manufacturers and other business men, who have to find a market for their goods all the year round, have been struggling with the ocean rates question since the outbreak of the war.

The rise of ocean rates antedates the beginning of hostilities and was being investigated by Sir Henry Drayton, Chairman of the Dominion Railway Board, on the petition of the business men and farmers of Canada. It was held then, and is still maintained, that part of the increase in rates was unjustifiable and designed to benefit ship owners at the expense of shippers.

War aggravated the situation by introducing a number of factors which were beyond the control of any party interested. German shipping disappeared and allied and neutral shipping had to carry the world's trade. Moreover, this available shipping was greatly reduced by the conversion of the largest and fastest steamers into cruisers and transports and by the activities of the enemy's war vessels.

Consequently, tonnage, which was expensive before the war, became much more expensive through the scarcity caused by the war.

Manufacturers suffered first. Markets were available in New Zealand, Australia and other outlying parts of the Empire as well as in Europe, but goods intended for

these markets were piled in the store houses of Canadian ocean ports because there were no ships to carry them away. Then the trade in munitions sprang up and these goods had the first call, with the result that peaceful goods suffered still more. Now comes the great flood of wheat, demanding speedy transportation to Europe. Bidding for the few ships available sends the price of tonnage up, which re-acts unfavorably on the selling price of the freight.

The problem is a tremendous one. One fact must be kept clearly in mind by all Canadians—it is the first duty of the British Government to handle its shipping in any way which will best assist in the successful prosecution of the war. The price we receive for our wheat or our manufactured goods is important, but it is a secondary consideration.

If the Admiralty can spare ships we will get more tonnage and the freight rates will come down; if the Admiralty cannot spare ships we shall have to take our medicine. But the Admiralty and the Dominion Government should satisfy themselves what proportion of the increase is really due to the scarcity of ships and what is due to the rapacity of ship owners, who should not be allowed to take abnormal tolls from the profits of Canadian farmers and manufacturers.

Montreal Firm to Build Elevators in Argentine.

MR. JAMES SPELMAN, President of the John S. Metcalfe Company, Limited, of Montreal, has been visiting Buenos Aires in connection with the proposal of that company for the construction of an extensive system of grain elevators, according to the *Review of River Plate*. It is understood that the project provides for three terminal elevators besides a large number of district elevators which will be built at points indicated by the Argentine Government. It is probable that armored cement will be used for the construction.

Although Canadian manufacturers are finding great difficulty in increasing export trade to South America, owing to lack of banking and transportation facilities, the possibility of furnishing material to these contractors is one that should bear investigation.

Canadian manufacturers would be in a better position to attack difficult foreign markets if they were first strengthened by securing the elevator construction business available in this country.

United States Industries in the War.

HOW United States manufacturers were confronted with industrial problems as a result of the outbreak of war and how they are solving these problems is set forth in an article entitled, "Effects of the War on American Industries," which is published in *The Scientific American* by Edward Ewing Pratt, Chief of the Bureau of Foreign and Domestic Commerce of the United States.

"The influence of the war upon our American industries is of a two-fold nature," says Mr. Pratt. "There are direct visible results, essentially of a transitory nature, and destined to terminate with the approach of peace. There are other results, less evident to the eye, but increasing with each added day of the conflict, and bound to be of far-reaching import in the evolution of our industries."

He points out that United States factories were totally unprepared to furnish more than a fraction of the amount of picric acid and trinitro-toluol needed for high explosives but that this difficulty was overcome by installing recovery devices in connection with coke plants.

In regard to dye-stuffs, Mr. Pratt says: "The end of the war will find us in a position to supply all the crude material needed in the manufacture of such artificial dye-stuffs as the country has hitherto imported from Europe, and in the preparation of a variety of medicinal and allied compounds, for which we have also depended upon foreign sources."

As an illustration, he shows that the curved faces of clocks and watches for many years came exclusively from Germany. When imports ceased last autumn, manufacturers of time-pieces consulted some of the leading glass makers, with the result that inside of a month curved discs were being produced, and before a second month had passed, the cost of production was reduced to a figure below the current prices of German manufacturers.

Before the war the United States imported a considerable number of small fine brushes for water-color work from Germany. A United States firm is now manufacturing these brushes and is securing the fine hairs needed in the process from the insides of the ears of cattle killed in the slaughter houses of Chicago.

The annual importation of barium minerals into the United States was formerly 17,000,000 pounds but, during the past twelve months, one establishment has introduced the manufacture on a large scale of these minerals by utilizing the deposits of barytes in Tennessee, Georgia and North Carolina.

Carbolic acid used by United States manufacturers for the records of phonographs and similar devices came from Germany and Great Britain. After the outbreak of war the price rose from 9c. to \$1.50 a pound. Thomas Edison experimented in his factory at Orange, New Jersey, and is now manufacturing 2,500 pounds of carbolic acid a day, using as a basic material the benzol which formerly went to waste as an ungathered by-product of coke plants. Mr. Edison also turned his attention to analine, of which 2,500,000 pounds had been imported annually by United States buyers and manufacturers in the form of oil or salts. Nine-tenths of this came from Germany. Edison's analine factory, by utilizing benzol from coke works, is now manufacturing between 4,000 to 6,000 pounds a day.

"In the future," says Mr. Pratt, "dye-stuffs will occupy a more important position in the textile world, and a more ample recognition will be accorded to the highly perfected processes of recent years, insuring their fastness upon the animal and vegetable fibres. At the same time we can

look forward with confidence to the evolution of a genuine American coal-tar color industry."

The United States was also confronted by a potash situation, as the great source of potash salts was in Germany. Investigations have been made by the Government to determine the amount of potash in beds of kelp floating on the waves of the Pacific Coast. It has been found that every year the waters of the Pacific Coast of the United States produce a crop in which potash salts, possessing a normal value of over \$90,000,000, are available. A recent publication of the Bureau of Foreign and Domestic Commerce shows that this crop can be harvested, dried, ground and transported to the Atlantic Coast at a cost far beneath that paid for German potash.

Mr. Pratt has shown some of the results which have been achieved by United States scientists and manufacturers in a difficult situation. He realizes, too, the wisdom of developing to the utmost a nation's resources. "In a more or less uncomfortable way," he says, "we have suddenly been brought to recognize the unwisdom, the folly, of shipping vast amounts of the crude material of our farms, forests and mines, three thousand miles across the ocean and buying it back in a manufactured form at a vastly enhanced price."

Cost of Living in the United States Falling.

A STEADY decline in the cost of living in the United States is recorded by the *New York Annalist*, which keeps an index number based on the average wholesale price of twenty-five food commodities selected and arranged to represent a theoretical family's budget. The average of this index number for 1913 was 139.98; in 1914 the average was 146.07; for the week ending September 11th, 1915, the average was 137.09. When the present war commenced the index number stood at about 142; by the first of September, 1914, it had risen to about 163, an extraordinary increase. In February, 1915, it got as high as 158, and since that time there has been a steady and marked decrease to 137, the average for the week ending September 11, 1915. The rapid falling of the price of food would tend to prove that in spite of the immense export trade to Europe the production of food has been sufficient, owing to excellent crops, to supply not only foreign demands but also to cheapen prices at home.

The Maple Leaf Magazine.

WE have received a circular from Staff-Sergeant Charles Crean, Honorary Secretary Canadian Pay and Record Office, Prisoners of War and Field Forces Tobacco and Cigarette Fund, and Editor of *Maple Leaf Magazine*, London, England, which is published for the benefit of the above fund. This circular appeal is directed to Canadians, as well as others, for funds to buy tobacco for British and Canadian soldiers. While this is a worthy object, we notice that certain tobacco is described as brands which "are the favorites with the

Canadians or the British" and that none of these brands are Canadian. We suggest to the Editor that as Canada produces good tobacco, Canadians would probably prefer to contribute to a fund which included Canadian tobacco among the brands specially recommended.

Making Big Guns in Canada.

ONE more triumph for the ingenuity and resourcefulness of Canadian manufacturers will be realized if they can succeed in their attempt to manufacture heavy guns. That they have determined to undertake the task is in itself almost a guarantee of success.

Before the outbreak of war munitions were produced in this country only to a very limited extent. Their manufacture opened a new field of endeavor, bristling with unknown difficulties. When the time of trial came Canadian manufacturers were not found wanting. With extraordinary courage and ingenuity they remodelled their plants, investigated and adapted the most difficult processes and mastered problems which, in normal times, might have been considered insurmountable. Munitions of war in the broadest sense of that term are being manufactured now in all parts of Canada by men who were entirely ignorant of the necessary processes a year ago. Encouraged by their success, Canadian manufacturers will now attack probably the most difficult problem of all—the manufacture of heavy artillery. This requires not only a high degree of engineering skill but also the installation of heavy machinery and the securing of special labor. Our huge industrial plant, which many thought to be too extensive for our needs when the era of construction began to wane, is being adapted with surprising speed and success to the task of assisting to defend the British Empire from its enemies.

We Can Make More Munitions.

ALTHOUGH large and numerous war orders have been placed in this country it should not be imagined that we are approaching our capacity for turning out war munitions. The annual industrial output of the factories of Canada is estimated at about \$1,400,000,000.

We realize, however, that the Imperial authorities must subordinate preferences to the stern necessities imposed by the war. They must have munitions promptly in great quantities. More important still, they must make provision for payment. At present they are borrowing a huge sum from certain parties in the United States to pay for munitions purchased from United States concerns. Canada cannot lend money to them to pay for the munitions bought in Canada.

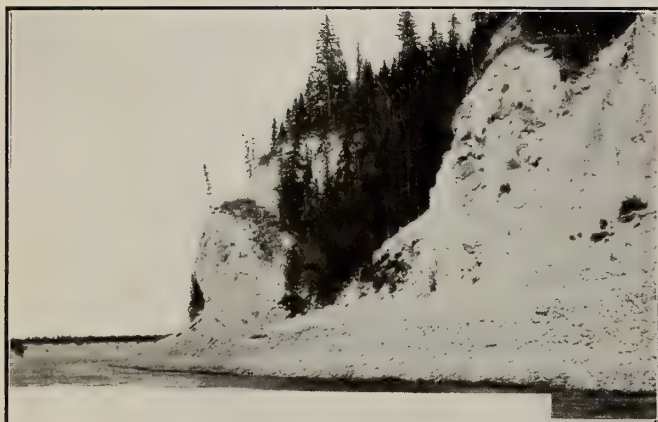
We can only be thankful for what orders we have received and hope to get more.

Sir Robert Borden and other Canadian public men have enlightened the Imperial authorities as to what Canadian industry can accomplish and we hope to see the capacity of all plants in this country, which are capable of manufacturing munitions of war, extended to the utmost.

D. A. THOMAS AND THE PEACE RIVER

Railway and Development Plans Under Way to Commercialize the Resources of the "Last Great West"

By NORMAN LAMBERT



Alabaster
Gypsum
Cliff.
Peace
River



Mr. Law's
Party



Mr. C. F. Law
in foreground



Cooking by Gas on Athabasca
River. Note White Gas Bubbles



Timber on the Peace River

BEFORE the tragedy of the *Lusitania*, last May, only a few people in Canada were familiar with the name of D. A. Thomas, the "Welsh Coal King." His daughter, Lady Mackworth, the prominent suffragette, was known more generally, perhaps, throughout America than her father. The war, however, has introduced both father and daughter to the people of this country in such a public way that they have emerged from their more or less isolated prominence in Britain into the wider and brighter light of the Empire. Following their miraculous escape from the sinking of the *Lusitania*, Mr. Thomas was delegated by the British Government to come to America as the representative of Mr. Lloyd George, the new Minister of Munitions, and Lady Mackworth stepped into her father's place in the offices of the great Cambrian collieries at Cardiff, Wales. While he worked in America behind the industries that should provide increased supplies of munitions for Great Britain and her Allies, she dealt with the strikers of South Wales, and maintained the necessarily increased output of "smokeless" coal for the British navy.

But the war has eclipsed for the time being a connection between Canada and Mr. D. A. Thomas, which is far more important and interesting than that pertaining to his present responsible position as a buyer of munitions for the Imperial government. Two years ago, Mr. Thomas visited Canada, and journeyed across the continent to Vancouver, where he met a man named Charles F. Law, Mr. Law, who has spent the last twenty years in exploring the wilds of northern British Columbia and northern Alberta, talked to the millionaire coal baron from Wales for thirty minutes. He talked, with a map of those northern districts on the table, and he had original photographs which told better than words could depict, the character of that new country. D. A. Thomas became interested, and later, Mr. Law followed the Welsh capitalist back to Britain. The result was, that Charles F. Law became the representative of D. A. Thomas, in Canada, and today their names are associated with two companies, which were incorporated under the Railway Act of the Dominion, and called "Pacific, Peace River and Athabasca Railway Company," and "The Peace River Tramway and Navigation Company." About the middle of May last, the daily newspapers gave space to a short despatch from Ottawa, which announced that a charter had been granted to Mr. D. A. Thomas, for the construction of a railroad from Athabasca Landing to Fort Vermilion, Alberta, and the despatch also said that the purpose of the proposed railway was to open up valuable coal areas somewhere north, along the Peace River. That was the first public intimation that D. A. Thomas had become interested in the development of Canada, and it was also the first open step towards the establishment of a system of transportation which promises to reach four hundred miles farther north than Edmonton, and link up northern Alberta and northern British Columbia with the Pacific coast.

In the Omineca district in British Columbia, in the Peace River country, near Fort Vermilion, in Alberta, and along the Athabasca River, north-east of Athabasca Landing, the Thomas interests have prospects of a mineral character, which have induced the projection of an extensive system of rail and water transportation. The immediate source of interest to these pioneer builders in the new North, is not coal, but oil. And it is the presence of oil in the vicinity of the Peace River Chutes, near Fort Vermilion, which has invited the building of the line of railway from Athabasca Landing to



The Thomas Railways

Fort Vermilion. Last year, a party of engineers and geologists, headed by C. F. Law, of Vancouver, explored a vast area of territory bordering along and between the Peace and Athabasca Rivers. Early this summer, another party went north with oil-boring machinery, and have been at work drilling on the claims of the Pacific, Peace River and Athabasca Railway Company, at Peace River Chutes. At the end of June last, a staff of bridge-builders arrived at Athabasca Landing, and after settling the question of crossing the river at that town, pushed northward over the entire route to Vermilion, conducting a general reconnaissance. This preliminary work, it was expected last June, would occupy three months. The work of actual construction, it is believed, will commence next spring, and, according to the word of Hon. A. G. Mackay, representing the Province of Alberta in the negotiations with the Pacific, Peace River and Athabasca Railroad, the entire road should be completed in two years. In addition to the building of that 300 miles of railway, plans are under way for the installation next spring of a line of transportation on the Peace River, from Hudson's Hope, British Columbia, to Peace River Chutes, Alberta, a distance of 570 miles. At Peace River Crossing, which is 240 miles below Hudson's Hope, and about 330 miles above Peace River Chutes, a large river steamer, with a five-foot draft, is now being constructed, and will be put in service as soon as the river is clear next year. The other piece of development, which is also being conducted under the auspices of the Peace River Tramway and Navigation Company, is the construction of two tramways, first, over the two miles of portage at the Peace River Chutes, and secondly, at Slave River Falls, which is about half-way between Lake Athabasca and Great Slave Lake. At the second place, eighteen miles of portage has to be crossed, and with the building of a tramway at that point, a free course will be then given from Hudson's Hope, on the Peace River, or from Fort McMurray, on the Athabasca, to the Slave River, and on for 1,400 miles, across Great Slave Lake, and down the Mackenzie River, to the Arctic Ocean. The plans for the two tramways which have been mentioned, were approved finally by the Dominion Railway Board last June.

To get a proper view or impression of the north country, which has been so roughly sketched along the lines of the rivers, in the preceding paragraph, it is necessary to roll back those partly exposed maps of Canada which are to be seen hanging in the average business office, until the real extent of those vast northerly areas of the Great North-west, are wholly revealed. Then you will see that the West which we know now, as the crop areas of Manitoba, Saskatchewan, and Alberta, covers only a very small space to the south of these hundreds of untouched miles of territory stretching northward to the very edge of the Arctic circle. The last forty years have seen the opening and the settlement of the southern half—the prairie half—of the North-West Territories. The eyes of many peoples are beginning to wander now to those northerly regions, and already we are fascinated with the stories that come from the new northland. The next forty years should be the era of development for the remaining northern half of this last great West. There is, indeed, romance in the project to which D. A. Thomas—one of the old world, who has made his fortune and stood behind the navy of Britain in the coal mines of South Wales—has laid his hand, as a pioneer in a remote wilderness of an overseas dominion. Coal from the mines of Britain feeds the navy to-day. Shall oil from new fields in Canada supply the Empire's needs to-morrow? That is "the gleam" which is leading British capital and brains into these schemes of transportation in the hinterland of Alberta and British Columbia.

Dr. T. O. Bosworth, D.Sc. (Lond.), M.A., (Cambs), F.G.S., late of His Majesty's Geological Survey, London, England, is

Rocky Mountain Canyon
Peace River.
Coal Deposits Here



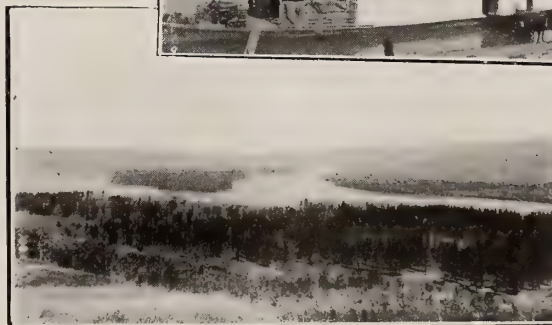
H. B. Co.
Vermilion Post



H. B. Co.
Peace River Steamer



Peace River at Crossing Mouth of Smoky River. End of Track Edmonton Dunvegan Railway



one of the authorities who has recently explored the far north, and speaking of the prospects for oil in that region, last May, in Edmonton, upon his return from the wilds of northern Alberta, he said: "First of all, far away in the regions of the Mackenzie River and the Great Slave Lake, I found oil fields—undoubted, promising oil fields; not one field, but a number of fields, and these were separated from one another sometimes by as much as hundreds of miles. The fact is that these fields are petroliferous, the geological structures and all the indications being as good as could be; they were just what one might find, or expect to find, on any of the great oil fields of the world. The oil originates in a series of black bituminous shales and limestones, and this series occurs over a very wide range of country. The country is so bituminous that in places where outcrops of these rocks occur, there is a strong bituminous smell. In places, these rocks are burning at their outcrops, and if you walk on the rocks your boots will actually be scorched. There are sections of these black rocks which have burned spontaneously until they have become a bright brick-red color, and the oil generated in these series of schists has been stored up in the porous formations which overlie these rocks in various formations of the Devonian system. In some districts the oil is in sandstones of green sand, which are saturated with oil, and in other districts still, the oil is stored up in porous dolomites. The oil differs in the different fields, as also do the containing rocks. In some places, one may walk along the water's edge and see liquid oil seep out over this rock and run into the water. In some places you may even see the oil flowing right out into the stream. There are large spreads of pure black pitch, and there are pools of oil—numerous pools of oil—and from these pools you can actually bale the oil out with a pail."

"The oil fields I have mentioned, in the northern regions, cover a lot of ground around the south end of the Slave Lake and the northern portions of the Mackenzie River. There is also, most certainly, a smaller field on the Peace River."

It is this "smaller field on the Peace River," that D. A. Thomas proposes to develop, and the indications which Dr. Bosworth describes in his report of the region farther north, are borne out in detail by the report of Charles F. Law and his party. The pictures which accompany this article were taken during Mr. Law's expedition through the Peace River and Athabasca River territory, last year, and they show the "oil pool" and the "oil seepage" to which Dr. Bosworth refers. Another rich source of petroleum is shown in the picture of the tar sands along the shores of the Athabasca

River. The circumstances in this unique field of the Athabasca are quite different from those in the Mackenzie or Peace River areas. Dr. Bosworth, speaking of the Tar Sand Field of the Athabasca, said, "It is necessary to see this thing to believe it, for the outcrop of tar sand along the Athabasca River is the greatest exposure of Asphaltum and Petroleum in the known world. For nearly 100 miles along the Athabasca River, this great sheet of tar sands extends, and in places forms cliffs 200 feet high. This rock is porous sandstone which occurs at the base of the Cretaceous formation, and it rests on the

formation of the Devonian limestones, being almost completely saturated with dark, crude oil. More precisely, the oil when tested, shows from ten to twenty per cent. of asphaltic matter. This is not merely residuum, from which the lighter oil has evaporated, but consists very largely of lubricating oil, kerosene, and gasoline, for on distillation, it gives off oils at low temperatures."

Dr. Bosworth who tested the Tar Sands of the Athabasca, estimates that they cover an area of at least two thousand square miles, and probably ten thousand square miles. "Experiments which I have made," he says, "and which other people have made, agree in showing from ten to twenty gallons of petroleum per ton in that rock." And this mine of natural wealth, D. A. Thomas has in mind, as well as the Peace River, as an area directly tributary to the Pacific, Peace River and Athabasca Railway Company.

When the party of engineers and prospectors, headed by Chas. F. Law, explored northern Alberta for Mr. Thomas last year, it not only went down the Athabasca River, but it went clear to Hudson's Hope, B.C., on the Peace, and penetrated the country inland, for miles. As the journey progressed, the explorers determined where they would bore for oil, but they also found other encouraging indications of mineral wealth.

Along the Peace River, not far from Fort Vermilion, as one of the accompanying pictures shows, valuable deposits of Alabaster Gypsum were discovered. They were found in the form of huge cliffs bordering along the river, and in that vicinity salt springs were found, which suggested in the minds of some men in the party, the valuable presence of potash. Extensive areas of coal were also located. The picture, showing the island and shores of the Peace River, near Hudson's Hope, gives one a fair idea of the extensive outcroppings of coal at that point. Then, the natural gas that is to be found everywhere in that northern country, is a feature. At Pelican Rapids, on the Athabasca, there is a jet of natural gas which has been burning constantly since 1907. The gas was directed through an iron pipe and lighted by some engineers who



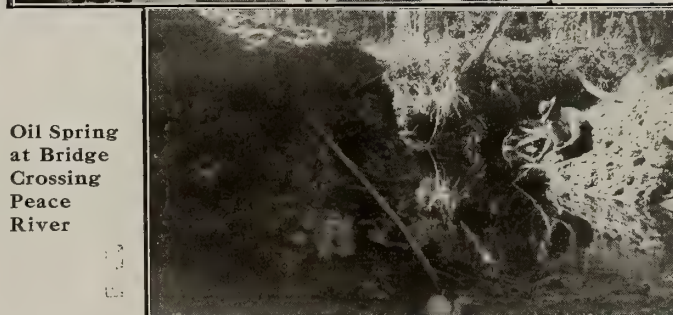
Vermilion
Chutes
25 feet Fall
250,000
Horse
Power



Oil Seepage
Peace River
White Spots
are Gas
Bubbles



Tar Sands
200 feet
thick
Athabasca
River



Oil Spring
at Bridge
Crossing
Peace
River

passed that way eight years ago. Now the flame shoots upward for a hundred feet, and the roar of it can be heard for miles. In other parts bubbles may be seen on the surface of the water, where the gas has escaped through the bed of the river.

While the mineral resources of Northern Alberta and Northern British Columbia have been the principal sources of attraction to D. A. Thomas and Charles F. Law, the real value of that vast northland lies in its great areas of fertile soil. If the men who are working for D. A. Thomas find that the surface indications of oil on the Peace River lead to a deep-seated bed of crude petroleum, which may be reached by a series of wells, the line of railway from Athabasca Landing to Fort Vermilion will surely be justified. But incidentally, it would reach an agricultural area which, in any event, will one day be supplied with railway and water connections to the world's markets. Between the Peace River Block in British Columbia on the West, and Fort Vermilion in Alberta, in the valley of the Peace River, and on the rolling plains which extend back from the river for miles, there are millions of acres of the finest arable land in the world, vacant and ready for the settler. At Fort Vermilion, the Dominion Government has an Experimental Farm which has been producing the very best quality of hard wheat every season for years. On the north bank of the Peace River, thirty-five miles above Fort Vermilion, there are luxuriant hay meadows yielding from two to three tons per acre. In the vicinity of Vermilion alone, there is an area of two million acres suitable for farming. Then, for sixty miles along the north bank of the Peace River, above Peace River Crossing, one can motor over wide rolling tracts of prairie land, which in places bears a hay crop yielding three tons per acre. There are also large areas of forest in which merchantable timber can be found—an asset, by the way, which the settlers on the plains farther south, in Alberta and Saskatchewan, would regard very highly. Beautiful stretches of park country, covered with a rich growth of pea-vine and other natural vegetation, mark the Peace River territory as a most desirable place for live stock and mixed farming. The few settlers who already are scattered broadcast through the far north, have proved the worth of that land, and it would seem to be only a matter of time before the northern part of Alberta, from an agricultural point of view, will be regarded as the most considerable part of that province.

The Edmonton, Dunvegan and British Columbia Railway, which is being built by J. D. McArthur, with the aid of the

Government of Alberta, already has proceeded some three hundred miles north-west from Edmonton, into the Peace River country. But for the greater part it runs south of the river, and will supply mainly the needs of the people living on that side of the Peace. With the exception of the line which it is proposed to build at once, from Athabasca Landing to Fort Vermilion, the Pacific, Peace River and Athabasca Railway system will keep to the north side of the Peace River. From Fort Vermilion, its line is projected south and westward, along the north bank of the Peace, to Peace River

Crossing, and thence directly west through Northern British Columbia to the Omineca country, where it turns south to one of the deep bays on the Pacific coast. The building of such a line will be a great work, historic as well as economic. For it will mark the last step in that westward march of Empire which began over four centuries ago with the discovery of America.

PLAN TO DAM NIAGARA RIVER

A scheme to develop 2,000,000 h.p. electric energy on the Niagara River is proposed by Dr. Kennard Thompson, Consulting Engineer of New York. His proposal is to place a 90-foot dam in the river about six miles below the Falls. This would impound the waters of the river back to within a mile of the Falls. Care would be taken not to interfere with the operation of any of the five great power plants now existing at Niagara Falls, Ontario, and Niagara Falls, New York, which are developing now about 5,000 h.p. daily. To carry this proposition into effect would require joint action on the part of Ontario and New York State and special treaty arrangements between the United States and Canada.

BRITAIN'S NEW BUDGET.

Great Britain's measures to make up a deficit of \$6,424,930,000 for the year ending March

31st, 1916, were recently laid before the House of Commons by Reginald McKenna, Chancellor of the Exchequer. The increases of taxation are as follows:

Forty per cent. increase in income tax. Minimum taxable income changed from \$800 to \$650.

New 60 per cent. on war profits.

Duty on sugar increased from 44 cents to \$2.24 per hundred-weight; 50 per cent. increase in duty on tea, coffee, chicory, tobacco and dried fruits; 100 per cent. increase in duty on patent medicines.

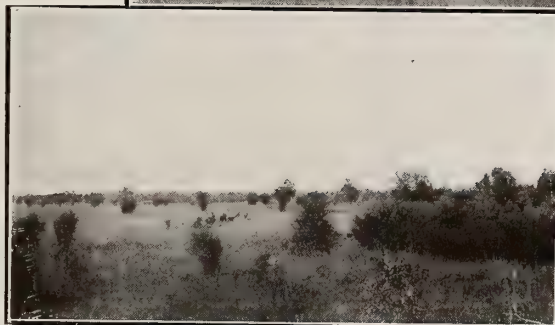
New 33 1-3 per cent. duty on motor cars, bicycles, picture films, clocks, watches, musical instruments, plate-glass and hats.

Halfpenny postal rate abolished and telegraph tolls increased.

Mr. Law's
Party of
Surveyors



Engineers
Survey-
ing
Thomas
Railways
Peace
River



Settler's
Home on
the Peace
River



Hay on
the Peace
River
Near
Vermilion



HOW THE EXCHANGE SITUATION AFFECTS THE EXPORT OF CANADIAN MUNITIONS AND OTHER MANUFACTURES

By H. M. P. ECKARDT

MANY of the Canadian manufacturers who are working on contracts for the Allied Governments have been watching the fluctuations of sterling exchange with anxious eyes. In those cases wherein the agreements call for payment in British funds or in the funds of one of the Allied nations, the ultimate results may be greatly affected by the rise or fall of exchange quotations. When some of the larger contracts were made, sterling rates were considerably higher than at present. Thus a manufacturer undertaking several months ago to produce shells or other munitions at a certain price, would, perhaps, be making deliveries now and drawing bills for the consideration. On appearing at the bank with his bills of exchange he may find that the conversion into Canadian money wipes out a large part of the net profit he expected to make. Thus in case of a portion or unit of goods which at the contract price would yield him £10,000, if exchange were at 4.60 on the day he sold to the bank he would get \$46,000; if at 4.50, \$45,000; and if at 4.70, \$47,000. The difference between the lowest and highest quotation would represent a matter of \$2,000, or a little more than four per cent. of the contract price.

Effect of Fluctuations.

As a matter of fact, the exchange market swung from 4.50 to 4.70 in two or three days at the beginning of September. There was a very sharp decline from above 4.70 to 4.50, followed by an even more rapid recovery. Probably most of our contracts were taken while exchange (demand bills) was between 4.72 and 4.79. This question of gain or loss in exchange would only present itself in cases where settlement is to be made in British or other European funds. Since exchange rates began to decline extensively, there has been an increasing demand in Canada and the United States for what is known as dollar credits that is, for contracts in which the European purchasers bind themselves to pay so much in dollars, in this country or at New York, for deliveries made under the terms of the contract. When the business is done on that basis the manufacturer is not concerned over the exchange fluctuations. As he makes deliveries he draws in dollars on the Canadian or American agents, or representatives of the purchasers, and the items go to his credit with inconsequential deductions for exchange. In this case the fiscal agents of the purchasers draw sterling bills on their principals in round amounts for large sums, sell them in the exchange market and hold the proceeds in banks at New York or at Canadian centres, for the purpose of meeting the payments due to manufacturers and others furnishing goods for export to Europe.

Dollars Instead of Pounds.

There is reason to believe that an increasing proportion of the business in war orders is being done in this last-mentioned way; and both the Canadian and American manufacturers naturally endeavor to have their contracts so written. The larger concerns, whose co-operation is so necessary to the Allies, have been able to insist on this proviso, and the parties or companies working in a smaller way are not obliged to undertake the contracts if they cannot get them on the

dollar basis, and the risk of loss on exchange seems too heavy. Of course in transactions where the consideration is payable in pounds, francs, or lire, the manufacturer usually endeavors to safeguard himself against exchange fluctuations through arranging for an extra margin of profit; but this is not always possible. Taking the case of the British Government for example, it is easy to see that whether the contracts are payable in dollars or pounds a steadily declining exchange rate in New York means a steadily rising cost or expense involved in purchasing articles on this side of the Atlantic. When the contracts are payable in dollars the British fiscal agents here must draw for an increasing number of pounds to produce a given sum in dollars; and when the contracts are payable in pounds, the manufacturers ask higher prices to cover the risk of exchange. This relatively higher cost, in turn, induces the British purchasers to restrict their purchases as much as possible, and in that way tends to reduce the volume of our export trade.

The exchanges with France, Italy, Russia are more depreciated than the exchange with London. Thus the other day when demand sterling was quoted at 4.63, sight bills on Paris were 5.99, and sight bills on Italy 6.47. The par of exchange at New York for both France and Italy is 5.18 and a fraction—which means that a bill for 5.18 francs (or 5.18 lire), would produce a dollar in the New York exchange market. Now it takes 5.99 francs, or 6.47 lire, to purchase or to produce that dollar.

Exchange With Russia.

Our manufacturers are interested considerably in Russian orders; and owing to Russia's inability to ship out her produce freely, the exchanges of that country with England have moved far beyond the normal limits. At rates quoted in London recently the rouble showed a depreciation of around 33 per cent. So, in case of our Russian orders, if we had to take bills on Russia in roubles and convert them into sterling at London, there would be a double depreciation to allow for—for the bill drawn in roubles we would get only about two-thirds of the normal or usual amount in pounds; and in converting the pounds again the dollar proceeds would represent a further shrinkage of from four to five per cent. However, it is very likely that in our contracts with Russia the consideration is to be paid to us in dollars or in pounds. London is, to a large extent, financing Russia's purchases here, and doubtless the London bankers charge up to the Czar's Government at prevailing rates of exchange all items of outlay on Russia's behalf. Incidentally, this gives an idea of the great handicap placed on Russia financially when the Dardanelles were closed. If the straits were forced and the passage into the Black Sea cleared, Russian exports of grain, etc., would probably so improve the exchange situation with England as to make Russian money go farther by 20 or 25 per cent. in effecting purchases abroad. In the meantime, the adverse exchanges have a tendency to cause Russia also to buy abroad only what is absolutely necessary.

At the time of writing this article the financial representatives appointed by the British and French Governments to visit the United States for the purpose of discussing means of remedying the abnormal exchanges, are about due at New

York, and it is considered likely that they will arrange some plan which will steady the market for some months to come. They may do this by means of a big short date loan to be taken by the American bankers. The expectation is that a loan may be announced any time. Such a loan, along with the heavy shipments of gold and American securities recently sent from London to New York, should strengthen the sterling market at the American centre quite materially, and in this event the matter of exchange would, for the time being, lose some of its importance for our exporters.

Apart from the rectification of the exchanges between New York and London, there is another reason why it is desirable that a big British loan should be speedily put through at New York. We all have noticed how irritating to the Germans and Austrians is the great activity manifested by the Americans in supplying shot and shell and munitions of all kinds to Great Britain and her Allies. Our enemies recognize that the assistance thus derived from the United States is constituting an important factor in the war. Some of the German authorities even go so far as to say that the United States are in a quasi-alliance with England and France. It seems quite clear that if in addition to thus supplying us with munitions on a large scale, the Americans lend Britain, or Britain and France, \$400,000,000 or \$500,000,000 for the purpose of paying for these supplies, the irritation at Berlin and Vienna would be considerably intensified. The Teutonic powers would then say that the United States were in a financial alliance with their enemies; and it seems likely that the chances of a diplomatic break between Washington and Berlin would be increased.

Abnormal Exchange.

It will be well to discuss briefly the present abnormal exchange situation in regard to its effect on the banking operations of our manufacturers. Ordinarily when a manufacturer who exports his products tenders a bill of exchange drawn on England, or another of the great European countries, his bank will, without hesitation, buy the bill from him at a fixed rate and credit his account immediately with the proceeds. The wild fluctuations of the recent past have necessarily forced the bankers to change their practice to a certain extent. If the ordinary methods were followed the banker might buy from his customer in Canada at 11 a.m. a bill for £10,000 at, say, 4.65. Then, notwithstanding that the bank used the utmost expedition and sold the bill again in the New York market by a few minutes after eleven, the rate may have gone down meantime to 4.60, involving the bank in a loss of \$500, less any allowance made for premium on New York funds.

Methods of Financing.

So it has become necessary to take the exchange "on collection" pending its disposal in New York. Thus the banker tells the customer, "We cannot quote a price for this bill until we have actually sold the sterling in New York; so we will send the bill down there, sell it, and advise you of the proceeds." Another way would be for the bank to wire its New York agents, asking them to sell at once an amount of sterling equal to that represented by the bill tendered by the Canadian customer, and as soon as the result was wired back fix the rate which he would receive. In either way the bank could handle the transactions without risk; but unless such precautions were taken there would be continual risk of heavy losses. Indeed, the Government returns point rather to the conclusion that the banks have sustained losses on sterling exchange accumulated by them in the first half of

1915. In this period their net balances in London were increased nearly \$19,000,000; and the period was one of falling prices. In other words, the exchange thus accumulated could now be secured at lower rates. To sell it or realize upon it, present market prices must of course be taken. Perhaps some of the banks which have thus accumulated a large balance in London are in hopes that a big British loan in New York, may send prices of sterling bills high enough to enable them to get out clear of loss.

No Time for Prophecy.

With reference to the probable trend of exchange rates this fall, no one who values his reputation ventures to speak with positiveness. It has been mentioned that the gold shipments, backed up by a British loan in New York, may suffice to improve the exchange situation and keep the rates fairly steady for several months. On the other hand, it is to be remembered that the large deliveries on contracts made late in 1914 and early in 1915 did not commence until this month; and from now on there will be very large exports of breadstuffs and other produce in addition to the shipments of munitions, etc., manufactured in Canada and the States. These extraordinary sales to Europe will be in evidence during the remainder of the calendar year; and in spite of the measures taken by the European bankers, the pressure of bills of exchange may cause further weakness in the market.

Another uncertainty exists in connection with the military operations. Any decided advantage gained by the powers who are fighting against Prussian militarism would find reflection in the exchange market here. This is specially the case in regard to the Dardanelles operations. Success there would enable England to buy huge quantities of Russian grain and pay for it merely through crediting the amounts on Russia's debit balance. This would be much easier for London to finance. There is a common impression that the Allies are completing their plans for a concerted general offensive on all the western front and in the Dardanelles in October. Should these operations yield satisfactory results, or should Germany in any way show signs of weakening, the circumstance would have some tendency to strengthen the market here for sterling exchange.

ELECTIONS TO THE EXECUTIVE COMMITTEE.

At the meeting of the Executive Council of the Canadian Manufacturers Association the following were elected to the Executive Committee, for three-year term expiring September, 1918; Mr. Henry Bertram, The John Bertram & Sons Co., Limited, Dundas, Ont.; Mr. J. S. McKinnon, S. F. McKinnon & Co., Limited, Toronto (re-elected).

For two-year term expiring September, 1917, to fill the vacancy caused by the death of Mr. A. R. Clarke: Mr. Thomas Findley, Massey-Harris Co., Limited, Toronto.

For one-year term expiring September, 1916, to fill temporarily the vacancy caused by Colonel Smart's absence on military service: Mr. John R. Shaw, Canada Furniture Manufacturers, Limited, Woodstock, Ont.

Following certain changes made in the by-laws at the recent Convention, by which it is permissible to appoint as members of the Executive Council anywhere from one to ten Past Presidents of the Association of more than three years' standing, the following have been elected members of the Executive Council: Messrs. W. K. McNaught, John F. Ellis, C. A. Birge, C. C. Ballantyne, R. Hobson, Hon. A. E. Kemp, P. W. Ellis, W. K. George, H. Cockshutt, John Hendry.

TRANSPORTATION

By J. E. WALSH

Transcontinental Rates.

THE effect of competition by the Panama Canal has been felt so seriously by jobbers on the Pacific Coast that strong representations have been made by them to the Dominion Government as well as to the Canadian Manufacturers Association, to have a Customs officer stationed at New York in order that Canadian goods might be shipped via that port to the Pacific Coast.

The advisability of the Dominion Government subsidizing a line of steamers sailing from Montreal and Quebec in summer and St. John or Halifax in the winter to Vancouver and Victoria has also received consideration.

A special deputation appointed by the Canadian Manufacturers Association waited upon the Right Honourable, the Premier, in June last, and pointed out the difficulties under which the jobbers on the Coast, on the one hand, and the manufacturers, on the other, were laboring. Assurances were received that the representations which were made would receive the serious consideration of the Government.

The competition was felt so keenly by the United States transcontinental lines that they applied to the Interstate Commerce Commission for permission to disregard the "Long and Short Haul Clause" of the Interstate Commerce Act, and to establish commodity rates, which they thought would enable them to carry a portion of the traffic. The petition was granted, and a number of the rates went into effect on July 16th. About this time representatives of the Canadian railways asked Canadian manufacturers for a conference. They stated that they recognized the competition referred to, and that, whilst it was impossible to earn any proper return from rates which would enable those interested to meet the situation, they would, in view of the large national interests involved, put such rates into effect as are necessary to meet the present emergency. They emphasized the fact that they would only undertake to do so with the understanding that such rates are unremunerative, and must not be regarded as affording any measure of the reasonableness of rates to other destinations, or in other districts unaffected; that if such rates were to be taken in any way as a measure of the reasonableness of rates to destinations other than those actually affected by this water competition, they would be compelled to forego this transcontinental tonnage, and permit it to move through other channels of transportation. They made the further reservation that, should the financial burden resulting from rates meeting the Panama competition prove too onerous, they will have the right to withdraw them.

They also state that, if circumstances arise compelling some low commodity rates from Pacific Coast points to Eastern Canada, they would be willing, upon the ground of "public policy," to give like consideration to the situation, subject to the restrictions outlined in respect to special westbound commodity rates.

The jobbers on the Coast are informed as to the action being taken, and a number of them are in sympathy with the movement. In fact, it is stated that they are prepared to assist in securing an adjustment, which will enable those concerned to meet the competition and to keep the traffic in Canadian channels.

As these jobbers can supply information not obtainable in the East, and which is absolutely necessary, a conference is

now being arranged between their representatives and the railway and the Canadian Manufacturers Association, which it is expected will take place during the first part of October.

There has been some delay in this matter, but it has been due to causes beyond control.

Railway Transportation an Important Problem.

As railway transportation is one of the most important problems which exists in Canada at the present time, the following facts may be of interest to those who are studying it.

Railway statistics for the year 1914 show the comparative mileage of Canadian railways to be 30,795.

This raises Canada to fifth place among the nations of the world in the matter of railways.

11,364 miles of line were added during the past ten years.

Over 70 per cent. of the additions has been made in the West.

Large additions have been made to terminals and second tracks.

In addition to the above there is considerable mileage either surveyed or under contract.

Capitalization of Canadian system of railways was increased by \$276,990,000, during 1914. This brought the total liability up to \$1,808,820,761. In addition there were stocks amounting to \$64,637,500, and bonds totalling \$88,669,809 attached to lines officially regarded as being under construction; making a final total liability of \$1,962,128,070. Interest on all outstanding bonds was paid 1914. Dividends for the year ran up to \$30,434,601, as compared with \$27,000,000 plus in 1913.

An analysis of the railway statistics of Canada discloses the following:

The Dominion Government is committed to the following for guarantees:

Authorized	\$188,965,063.00
Executed	94,849,063.00
Bonds purchased	33,116,000.00

The Provincial Government guarantees are:

Manitoba Guarantees—

Authorized	\$25,221,580.00
Executed	24,589,036.65

Alberta Guarantees—

Authorized	\$55,810,450.00
Executed	40,200,450.00
Paid out of proceeds of bonds.....	17,561,778.17

Saskatchewan Guarantees—

Authorized	\$41,625,000.00
Executed	21,651,458.70
Paid out of proceeds of bonds	18,535,354.07

Ontario Guarantees—

Interest on bonds, Can. Northern Ry.	\$7,860,000.00
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Nova Scotia Guarantees—

Province advanced Halifax & South Western, \$13,500 per mile for 257.25 miles of railway, company giving mortgage for same. Total indebtedness, \$4,447,000. On the Canadian Northern securing the property that company gave the province bonds guaranteed by it, aggregating \$4,447,000, these bonds being secured by mortgage trust deed. The province still holds the bonds. After bonds are paid all the aid the company will have received will have been \$3,200 per mile.

British Columbia Guarantee—

Bonds authorized \$80,322,072.00

New Brunswick Guarantees—

Amounts guaranteed \$6,063,000.00
Earned and paid 4,806,964.46

Quebec Guarantees—

Bonds, Montreal & Western Railway Co. \$392,000.00

In case of the St John and Quebec Railway there is legislative authority to guarantee \$35,000 per mile of railway from the city of St. John to the town of Grand Falls, estimated at 214 miles. At present the amount of \$25,000 per mile for 170 miles has been guaranteed en bloc, namely, \$4,250,000, and held in trust for the company to be paid from time to time as earned.

The above guarantees added together make the following total:

Authorized.	Bonds Executed.	Guarantees Earned.
\$406,259,165	\$268,710,264	\$235,473,394

Cash aid given by the Federal and Provincial Governments, \$215,857,803.90.

Land grants, amounting to 43,613,949 acres, have been made by the Federal and Provincial Governments to the various railways.

These facts and figures cannot be overlooked in dealing with transportation problems in Canada to-day.

During the past five years the Dominion Government granted 49 railway charters under which construction has not yet been begun.

The United States Western Rate Case.

The United States Western Freight Rates Case, proceeding as it does simultaneously with our own Freight Rates Case, is interesting to Canadian shippers. The following article from *The Traffic World*, discusses the United States case and describes how Western railroads are preparing to fight the decision recently given against them by the Interstate Commerce Commission:

"The western railroads are preparing to make application for a reopening of their advanced rate case recently decided against them by the Interstate Commerce Commission on the large majority of issues. The impression is strong that the petition will be of no avail, though undoubtedly the Commission will listen courteously and even thoughtfully to what the legal representatives of the carriers have to say. This impression, which has existed since the intention of the carriers first became known, was heightened by what Commissioner Clark had to say in his address to the National Industrial Traffic League, referred to elsewhere. His remarks seemed to indicate that the Commission was firm in at least one reason for its decision. But the real reason for the impression is that the tendency of operating revenues for three or four months has been upward.

"In the Five Per Cent. case the carriers were helped, when they asked for a rehearing, by the fact that conditions pro-

duced by the war were at their worst when the application was made and while it was pending. There are men, who watched that proceeding, that believe the Commissioners are now wishing they had not reconsidered, but had stood pat on their first decision. The result of operations for the fiscal year ended June 30 last, was not as good as for the preceding fiscal year, but it was no worse than the result in most lines of business. One of the points most strenuously made by the shippers who objected to the advances was that the railroads were no worse off than any other line of business.

"The figures for the western district for June are not as good as the June figures of 1914, but the slump in business in the West was not coincident with the depression in the East. Comparatively normal conditions in that part of the country continued longer than in the East.

"Apparently the recovery is going to travel in the same way. The East is showing improvement over the corresponding months in 1914. The improvement in June, so far as the eastern district is concerned, was not due to the five per cent. advance in rates. The tonnage was greater than for June, 1914, and increase in the volume of business, it is pointed out by those who believe it would be a mistake for the Commission to reconsider its decision, is what will give the best sort of relief. Commissioner Clements, in his dissent in the second Five Per Cent. report, said that what the railroads most needed was not an advance of rates, but freight to carry.

"It almost goes without saying that if the western roads assert that they have more testimony, the Commission will reopen the case, at least to the extent of telling C. C. Wright, the attorney in charge of the case, that it will listen to it. Unless Mr. Wright asserts and makes a prima facie showing that he has additional testimony, the Commission is expected to say that it cannot see that there are any facts that were not considered at the first hearing."

TANK CARS FOR FIRE FIGHTING.

The management of the Government railways has made material progress in fire protection in Quebec since taking over the line of the National Transcontinental for operation. A tank car, for fire-fighting purposes, has been equipped and will be stationed at some convenient point between Edmundston and Quebec. This car has a capacity of ten thousand gallons and is equipped with hose to reach a fire five hundred feet from the track. The question of placing two similar cars at convenient points between the City of Quebec and the Ontario boundary is under consideration. Special fire patrols will also be necessary, and the details are being considered. Hon. Frank Cochrane, Minister of Railways and Canals, has announced that the same measures for fire protection will be taken on Government railways as are required by the Railway Commission of lines under private ownership. The measures referred to above constitute an excellent beginning. The Government railways are not under the jurisdiction of the Railway Commission.

Special tank cars for fire-fighting purposes constitute efficient means of conserving forest resources along railway lines. The Canadian Pacific Railway has two such cars stationed at Brownville Junction, Maine, where serious fires had previously occurred. The Grand Trunk Railway also has equipped a tank car during the present season, placing it at Algonquin Park station, to be used in extinguishing fires along the railway line between Ottawa and Depot Harbor, especial attention being given to that portion of the line within Algonquin Park. Excellent results have been secured by both the Canadian Pacific and Grand Trunk Railways from the use of these cars for fire-fighting work.—*Conservation.*

I N S U R A N C E

Canadian Fire Losses.

ACCORDING to the statistics prepared by the *Monetary Times*, the fire loss throughout Canada during the month of July amounted to \$773,269, as compared with \$1,107,156 during the month of June, and \$2,033,139 for the month of July last year. The total fire loss for the month of August amounts to \$403,693, as compared with \$2,291,379 for August, 1914. This brings the estimated fire loss of Canada for the first eight months of the present year to \$8,420,758.

Make-up of Fire Rate Must Be Shown in Policy.

The law in North Carolina now requires fire insurance companies or bureaus, when making rates, to furnish a detailed statement of the make-up of the rate to the owner of the property or his representative, and the insurance agent writing the policy on property is required to put upon the policy the basis rate, amount of deficiency charges, amount of credits and the rate at which written. Every agent of a fire insurance company is also required before insuring a policy on property situated in a city or town to inspect the same, informing himself as to its value and insurable condition.

Qualifications of a Fire Chief.

Those who have the appointment of a new fire chief for Toronto seem to have no idea at all of the requirements. The names of aldermen, ex-aldermen, police officers, militia officers, etc., are being put forward by cliques of one kind and another. So far not one name of a man with the requisite fire department qualifications has been seriously considered.

The chief of a modern fire brigade must not only be a good leader in the extinguishment of fire and know how to save life and property, but he should also fully realize that it is much better to have no fires at all to extinguish and accordingly be a leader in fire prevention. In the great cities on the continent of Europe and also in London, the chief of the fire brigade is not only an expert in fire extinguishment, but his foremost duty is the prevention of fire. He has the qualifications of an engineering expert, electrical, mechanical and building engineer, and the results obtained in those cities under that system in reducing the fire waste and consequently the cost of insurance, amply prove that they have adopted the right method.—*The Bulletin*.

Effect of War on Insurance Contracts.

According to Bunyon, the notable British authority on insurance law, some of the effects of war on insurance companies from the legal standpoint are as follows:

During war with the native country of an alien his right to enforce a contract entered into previous to the commencement of the war is suspended until the restoration of peace.

A contract entered into during war with an alien who is not resident in this country and under the protection of the Crown is absolutely void.

It may be doubted whether, if the policy were valid at its inception, but, after the declaration of war, the alien assured died in battle contending against the forces of this country, his representatives could, even after peace was restored, recover upon it.

The life of an alien enemy cannot be insured, even for the benefit of a British subject.

An alien, resident in this country by permission of the Government, is not considered an alien enemy so long as he peaceably demean himself, but if residence is accompanied with trading in an enemy's country the alien is considered an alien enemy.

In case of war, remittances of money to the country where the head office is situated may be impossible, and then it becomes necessary to consider whether the non-payment has been excused or the policy has lapsed.

Companies necessarily act through agents in all matters at a distance. If the agent's authority continues, payment or tender to him is sufficient to keep the policy alive, and if during war the company keeps no agent, a tender of the premiums after it was over might entitle the insured to recover damages if the company repudiated liability.

Investigation of Fire Waste.

It is announced that the Commission of Conservation has decided to conduct an exhaustive enquiry into Canada's fire waste, with a view to finding some remedy for the tremendous losses which take place in the Dominion each year. The work of the investigation will be supervised by Mr. J. Grove Smith, B.A., B.Sc., of the Canadian Fire Underwriters' Association, an acknowledged expert on the subject of fire waste. It is the intention of the Committee of Conservation that special attention shall be directed to (1) an exhaustive investigation of the causes and extent of fire loss in Canada; (2) an extensive survey of the present means employed in the control and extinguishment of fire; and (3) considerations and suggestions for remedial action along the lines and methods of fire prevention. The main investigation will deal with the records of fire losses throughout Canada, the capacity of existing water supplies, the efficiency and equipment of fire departments and provincial and local legislation. The investigation will probably occupy a period of six months and, on completion, a full report will be published by the Committee of Conservation. In addition to the matters outlined above the report will deal with a large number of side issues, such as the impairment of our national credit through fires; the distribution of fire loss through the channels of commerce and how it affects the cost of living; a comparison of fire loss in Canada with that in other countries; building construction as affecting the fire loss; fire insurance as it affects fire waste and fire protection; the attitude of insurance companies to fire waste and the influence of their inspection services upon fire protection; consideration of criminal arson and its extent in Canada; the traits of carelessness and inefficiency as originating fire; the legislation needed in Canada to control the present waste by fire; the adoption of methods of fire prevention as a public policy.

NEW CALGARY ELEVATOR READY.

The new Government grain elevator at Calgary is ready for use and will be available for handling this season's crop. It has a capacity of 3,000,000 bushels and cost \$1,000,000. This completes the chain of elevators built by the Government between the Great Lakes and the Rocky Mountains.

T A R I F F

By J. R. K. BRISTOL

CUSTOMS NOTICES.

War Measures—Prohibited Exports.

THE exportation of hides of cattle, buffaloes and horses and calf and goat skins, except when of Canadian origin, is now prohibited to all destinations abroad other than the United Kingdom, British possessions and Protectorates.

The exportation of wheat flour, wheat, barley, rye and other grains, except oats, is prohibited only to all foreign ports in Europe and on the Mediterranean and Black Seas other than those of France, Russia (except Baltic ports), Italy, Belgium, Spain and Portugal.

The Orders-in-Council which enforce the foregoing war measures amendments, follow:

AT THE GOVERNMENT HOUSE AT OTTAWA.

Monday, the 20th day of September, 1915.

Present:

His Excellency the Deputy Governor-General in Council.

The Governor-General in Council is pleased to order that the Order in Council of the 27th April, 1915, prohibiting the exportation of certain goods to all destinations other than the United Kingdom, British Possessions and Protectorates, France, Russia (except Baltic ports), Japan, United States, when for consumption in United States only, or shipped to specified consignees in the United Kingdom via the United States, or exported via the United States under license or dispensation from Canada, shall be and the same is hereby amended by striking thereout the following articles, viz.:—

Wheat flour, wheat, barley, rye and other grains except oats.

The Governor-General in Council is further pleased to order, under the provisions of sections 242 and 291 of The Customs Act, that the exportation of the following goods shall be and the same is hereby prohibited to all foreign ports in Europe and on the Mediterranean and Black Seas, other than those of France, Russia (except Baltic ports), Italy, Belgium, Spain and Portugal, under Regulations by the Minister of Customs, viz.:—

Wheat flour, wheat, barley, rye and other grains except oats.

RODOLPHE BOUDREAU,

Clerk of the Privy Council.

AT THE GOVERNMENT HOUSE AT OTTAWA.

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Hides of cattle, buffaloes and horses and calf and goat skins, except when of Canadian origin.

The Governor-General in Council, under the provisions of sections 242 and 291 of The Customs Act, is further pleased to order and it is hereby ordered as follows:—

The exportation of the following goods is hereby prohibited to all destinations abroad other than the United Kingdom, British Possessions and Protectorates, viz.:—

Hides of cattle, buffaloes and horses and calf and goat skins, except when of Canadian origin.

RODOLPHE BOUDREAU,

Clerk of the Privy Council.

LICENSES.

(Announcement of John McDougald, Esq., C.M.G.,
Commissioner of Customs.)

Notwithstanding the provisions of any prohibitory order, licenses may be issued, on application to the Department of Customs, Ottawa, for the export of wheat flour, wheat, rye, barley, etc., in special cases, such as the following, viz.:—

(1) For wheat flour and wheat to Holland, when consigned to the Netherlands Government, with the consent of that Government obtained beforehand in every case.

(2) For barley and rye to Holland, when consigned to the Netherlands Overseas Trust, with the consent of the Trust obtained beforehand in every case.

(3) For wheat flour, wheat and other grains except oats to Greece, in cases where the British Minister at Athens recommends the issue of a License after consignees have given him satisfactory guarantees.

(4) For wheat flour, wheat, barley and rye to Denmark and Norway, after enquiry in each case following an application to the Department of Customs from the consignor, stating the name and address of the consignee and the quantity and description of the commodity proposed to be exported.

In regard to goods destined for and permitted to be exported to Russia or neutral countries in Europe, it is essential that the Bill of Lading or a certified copy of it should be on board the exporting vessel.

It is desirable in the case of all exports that the goods be consigned on the shipping bills to a named consignee, and that the ultimate destination be clearly stated.

When goods are consigned to a bank or responsible financial house, notation may be made on the shipping bills, such as, "Notify A. B."—A. B. being the person or firm for whom the goods are ultimately destined.

War Measures—Prohibited Imports.

(Unset Diamonds.)

An Order in Council dated the 20th day of September, 1915, provides that the importation of unset diamonds into Canada is prohibited except when imported direct from the United Kingdom.

Foot and Mouth Disease.

(Consolidated Order.)

Under the provisions of The Animal Contagious Diseases Act, for the period of three months from September 9, 1915,

the importation or introduction into Canada of animals, or of the flesh, hides, wool, hoofs, horns or other parts of animals, or of hay, straw, fodder or manure, from the States of Alabama, Alaska, Arkansas, Connecticut, Delaware, District of Columbia, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North and South Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Vermont, Virginia, West Virginia and Wisconsin, is hereby prohibited, provided that,—

(1) Horses may be admitted upon the receipt of a special permit from the Veterinary Director-General.

(2) Race horses shipped by express, consigned to an incorporated Jockey Club or Racing Association, may be admitted without permit when complying with other regulations of the department.

(3) Dogs, with the exception of those used for herding cattle or sheep, may be admitted.

(4) Cats, pet birds, live pigeons and menagerie or wild animals, except deer, may be admitted.

(5) Live poultry may be admitted when accompanied by the affidavit of the owner or shipper that the said poultry have come from a state not under federal quarantine.

Dressed poultry may be admitted from any part of the United States except closed areas under federal quarantine, each shipment to be accompanied by a certificate of an officer of the Bureau of Animal Industry.

Transit of live poultry through Canada from one United States point to another is permitted in car lots when the shipment is accompanied by the affidavit of the owner or shipper that the poultry are the product of a state not under federal quarantine. Cars to pass the inspection of officers at the boundary as to sanitary condition and freedom from hay, straw or chaff.

(6) One-day-old chicks may be imported from any part of the United States.

The requirements with regard to hay and straw packing must be observed. Crates containing either hay or straw will be refused entry.

(7) Cured and cooked meats, lard and tallow, butter and eggs may be imported.

(8) Dressed meats, either fresh or cured, in car lots, en route from one United States point to another, may be permitted to pass through Canada in bond in sealed cars, provided also that the steps and running boards of such cars have been disinfected to the satisfaction of an inspector of the Department of Agriculture at the port of entry into Canada.

Dressed meats, either fresh or cured, may be admitted when accompanied by a certificate of an officer of the Bureau of Animal Industry that the shipment has not originated in a closed or exposed area of a state under federal quarantine, provided shipments do not include tongues, heads or feet in the fresh, unpickled state.

The importation of dressed hogs from the United States of America is permitted under the following conditions:—

Hogs must have been killed and dressed in an establishment under federal inspection.

Carcasses must have been singed, and feet, head and viscera removed, including kidneys, tenderloins and leaf lard.

Car lots only will be admitted.

Cars are to be sealed by a Bureau of Animal Industry Inspector, consigned to a Canadian establishment under inspection and received there with unbroken seal. Seals are to be broken by the Inspector of the Health of Animals Branch stationed at the establishment.

Importers of dressed hogs under this amendment will be required to export every portion of the hogs so exported, with

the exception of such small trimmings as are rendered, or lean trimmings, which must be cooked before being offered for sale.

After unloading the cars are to be cleansed and disinfected to the satisfaction of the inspector at the expense of the importer.

These shipments must be accompanied by a certificate that they consist only of singed carcasses, consigned to an abattoir under federal inspection. This certificate must be presented to the Veterinary Inspector at the boundary.

(9) Milk and cream may be imported provided that same are accompanied by a certificate of pasteurization signed by an officer of the Bureau of Animal Industry or by a local health officer. Cans for the transportation of milk or cream may be admitted only when accompanied by a certificate of sterilization signed by an officer of the Bureau of Animal Industry or by local health officer.

(10) Hides from countries other than the United States may be admitted to Canada from the United States when accompanied by an affidavit of the shipper that the shipment is of foreign origin, and that the said hides have not come in contact with domestic hides of the United States.

(11) United States hides may only be admitted under the following conditions:—

(a) That they must be accompanied by a certificate of an officer of the Bureau of Animal Industry that they have been thoroughly disinfected under the regulations of the said Bureau of Animal Industry, or

(b) That they have been taken from animals slaughtered prior to August 1, 1914, and have ever since that date been stored away from contact with other hides or live animals (affidavits to this effect must accompany shipment); or

(c) That they have been taken from animals slaughtered outside of the States under federal quarantine, that is, outside the area comprised by the following States: Connecticut, Delaware, District of Columbia, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Minnesota, Massachusetts, Michigan, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, New Hampshire, Virginia, West Virginia and Wisconsin (affidavit to this effect must accompany shipment); or

(d) That they are shipped in car lots consigned to tanners or tanning companies, after having received ante-mortem and post-mortem federal inspection of the Bureau of Animal Industry of the United States. Such shipments must be accompanied by a certificate signed by an officer of the Bureau of Animal Industry that the hides are from animals submitted to inspection as aforesaid.

Cars containing shipments of hides under (d) of paragraph 11 of this Order must be disinfected under the supervision of an officer of the Health of Animals Branch of the Department of Agriculture before being used for other purposes.

Men employed in handling and unloading any shipments of the kinds above described will be required to wash and disinfect their hands before leaving the premises.

(12) Hides, in sealed, closed cars, may be allowed transit through Canada from one United States point to another, provided the steps and running boards are disinfected to the satisfaction of an officer of this Department previous to entering Canada.

(13) Pickled pelts of sheep or goats, with wool or hair removed, packed in casks or bundles may be admitted.

(14) Skins of wild fur-bearing animals tanned or untanned, may be admitted.

(15) Tanned sheep skins with the wool attached may only be admitted after fumigation with formaldehyde. Importers will be required to furnish all the necessary disinfectants and conveniences for the carrying out of this Order.

(16) Tanned sheep skins may be admitted if accompanied by the affidavit of the shipper that they were derived from sheep killed prior to 1st August, 1914, and have not been in contact with prohibited wools or skins.

(17) The importation of pelts in the uncured state is prohibited.

(18) Wools from countries other than the United States, in the original bales, may be admitted from the United States when accompanied by the affidavits of the owner that the bales have not been stored with or come in contact with prohibited wools or pelts of the United States.

(19) Fleece wool shorn from living sheep during or previous to the spring of 1914 may be admitted if it has not been mixed or stored with other classes of wool prohibited by this Order. The affidavit of the shipper to this effect will be required.

(20) Wool, which is accompanied by the certificate of an officer of the Bureau of Animal Industry to the effect that it has been disinfected with formaldehyde under his supervision, may be admitted.

(21) Pulled wool may be admitted provided it has been scoured and after the scouring process has been dried at a temperature of 160 degrees F. (Affidavit to this effect must accompany each shipment.)

(22) Pulled wool, unscoured, may be admitted if accompanied by an affidavit that it was taken from the pelts of sheep killed before the 1st August, 1914, and has not come in contact with prohibited wools.

If deemed necessary at any time any shipment of wool may be required to undergo disinfection by means of formaldehyde, under the supervision of an officer of this Department.

(23) Wool in car lots, destined from one United States point to another, may be permitted to pass through Canada under the usual regulations governing sealing and disinfecting cars.

(24) Hair from countries other than the United States may be admitted under the same conditions as wool.

(25) Hair from the United States may be admitted when accompanied by a certificate of an officer of the Bureau of Animal Industry stating that the said hair is free from infection.

(26) Feathers of domestic poultry, securely packed and consigned to manufacturers or their agents, may be admitted if accompanied by the affidavit of the shipper that the said feathers have not come from infected premises.

(27) Hay may be imported from the Upper or Northern Peninsula of the State of Michigan and from Sugar Island, in the County of Chippewa, in the State of Michigan, when accompanied by the affidavit of the owner or shipper that the said hay is the product of the above described portion of the State of Michigan, and has not been exposed to the infection of foot and mouth disease.

Hay from the State of Vermont will be admitted provided each shipment is accompanied by an affidavit that the hay is the product of that State.

(28) Straw or hay used in packing fragile merchandise imported from foreign countries via the United States may be admitted provided the goods are contained in their original packages. (Affidavits to this effect must accompany each shipment.)

(29) Hay or straw used in packing merchandise from the States mentioned in the first paragraph of this order may be admitted, provided the shipment is accompanied by the affidavit of the shipper, or of a Bureau of Animal Industry Inspector stating that the said hay or straw was harvested and stored in an area that has not been under federal quarantine for foot and mouth disease, or else that the said hay or straw

has been fumigated with formaldehyde, as required by the Bureau of Animal Industry.

(30) Hay in sealed, closed cars may be allowed transit through Canada from one United States point to another, provided the steps and running boards are disinfected to the satisfaction of an officer of this Department previous to entering Canada.

(31) Pulverized and sterilized sheep manure in transit through Canada from one United States point to another may be admitted in boxes and barrels in closed sealed cars.

(32) Animals and their products, also hay and straw, may be imported into Canada from the States of North Dakota, South Dakota, Montana, Washington, Oregon, Idaho, Wyoming, Nebraska, Colorado, Utah, Nevada, California, Arizona, New Mexico, Oklahoma and Texas, provided they are accompanied by the affidavit of the owner or shipper that they are the product of one of the above mentioned States, and have not been unloaded in any State other than one of the above-mentioned States. In the case of live animals, the usual requirements of the Department as to quarantine health certificates, or mallein or tuberculin tests must be observed.

The Order under the Animal Contagious Diseases Act of the 9th day of May, 1915, and the amendments thereto are hereby repealed and replaced by the foregoing.

Dated at Ottawa, this ninth day of September, nineteen hundred and fifteen.

Gratifying Increase in Customs Revenue.

For the month of August, 1915, the Customs duties collected amounted to \$8,431,565, as compared with \$8,358,948 collected during the corresponding month last year. The increase probably marks the first stage of a general improvement in Customs collections; and, when considered in connection with collections from the other war taxes of February last, in respect to certain financial institutions, and on commercial paper, letters, telegrams, railway fares, medicinal preparations, etc., the fact must be appreciated, that the war taxes are bringing the expected results.

The statistical returns show the duties collected for the five months ending August, 1914, were \$36,840,480, as compared with \$36,514,037 for the corresponding period this year.

In regard to exports there has been a decided improvement. For the month of August, 1914, the exports of domestic produce were valued at \$31,510,732. Of this amount \$5,000,000 represented "manufactures." But in August, 1914, the total exports of domestic produce were valued at \$41,094,154, and of this amount over ten and a half millions represented "manufactures." For the five months ending August, 1914, the exports of Canadian produce were valued at \$149,077,286, whereas for the same period in 1915 the exports of domestic produce were valued at \$200,262,413.

SAINT MAURICE DAM.

The St. Maurice Construction Company, Limited, are installing a hydro-electric plant of 1,150 h.p. for the purpose of constructing the St. Maurice River dam, designed by the Quebec Streams Commission.

ZINC COMPANY IS FORMED.

Letters patent have been granted to the Electro-Zinc Co., Ltd., with headquarters at Sherbrooke, Que., and a capitalization of \$24,000. The incorporators comprise Leland D. Adams, of Oakland, California, mining engineer, and Charles H. Maxey, of Rutherford, N.J., mining operator. The company will operate mines, smelters and refineries.



LEGISLATION

Saskatchewan Legislation.

A SITUATION seriously affecting business interests has recently arisen in Saskatchewan as the result of enactments passed at the last session of the Legislature and a Royal Proclamation subsequently issued. The following points should suffice to indicate the causes from which the trouble sprang, its present gravity, and the mode of redress.

During the summer of 1914 a Commission was appointed by the Legislature to investigate grievances connected with the purchase of agricultural implements. In due time the Commission reported, and while it admitted that the weight of evidence showed very little cause for dissatisfaction with the conditions under which small implements were bought (including plows, harrows, seeders, mowers and binders), the Commission held that hardship was frequently inflicted as a result of the arduous conditions under which tractors and other forms of power machinery were ordinarily purchased for use on the farm.

The Farm Implement Act.

On the recommendation of this Commission the Legislature passed on June 24th last, an Act known as The Farm Implement Act, which regulates in great detail the conditions under which all sorts of farm implements are to be sold. For example, the vendor must file with the Minister of Agriculture, before the first of February in each year, a list of the implements he will offer for sale and the price at which he will offer them, whether for cash or for credit. He must also file similar information regarding parts and repairs, and the places in the Province where same are to be had.

Where implements are sold on credit and a contract is taken from the purchaser, the actual wording of that contract is specified in an appendix to the Act. If a small implement, it is in one kind of form, if a large implement it is in a different form, if a second-hand implement it must be in still another form, the use of which would violate certain express provisions of the Act and really nullify the contract.

Implements sold by the manufacturers to dealers must be sold under the same form of contract as is used for sales to farmers, though it is entirely unsuited to such transactions.

One of the clauses in the contract promises that either of the parties may cancel the order at any time before the actual settlement is accepted by the vendor, and the other party will have no claim for damages for any reason thereof. This largely destroys the value of an order to the implement companies and prevents them from estimating the reasonable requirements of their customers.

Amending The Exemption Act.

On the same date that the above Act was passed there was also passed a radical amendment to what is known as the Exemptions Act.

The purpose of this old Act, originally one of the Ordinances of the North-West Territories, was to protect the struggling farmer against the demands of a grasping creditor. Under its provision a farmer could hold as exempt from seizure under execution by the Sheriff certain chattels, such

as necessary food and clothing for himself and his family, three horses, six cows and certain other live stock, with feed for same, a wagon, a plow and certain other implements.

While the Sheriff could not under execution seize any of the goods above referred to, there was nothing to prevent a farmer, who was willing to do so, from giving a chattel mortgage on his exemptions to secure a debt or a temporary loan, and if the debtor failed to make his payment as provided in the mortgage the creditor might seize the property and sell same by public auction, applying the proceeds on the debt due under the mortgage.

This practice was very generally resorted to in a country where the settlers possessed very limited means and where personal credit could only be established by making the utmost use of one's possessions. Implement manufacturers and implement dealers have repeatedly felt constrained to secure themselves for past due paper by obtaining such mortgages from debtor farmers, not with the idea of seizing (for the amount of agricultural paper held by all implement manufacturers is clear evidence of the leniency of their policy and of the fact that they seize only in cases of absolute necessity or where there is an obvious intention to defraud) but simply for their own better protection.

Destroys Chattel Mortgage Security.

Section 7 of the new Act states that notwithstanding anything contained in any Act in force in Saskatchewan, or in any agreement to the contrary, any person who has executed a chattel mortgage on any of the chattels referred to in the Exemptions Act shall, in case of seizure under the said mortgage, have the right to claim as exempt from such seizure and from sale any such chattels covered by said mortgage which cannot be so seized or sold without depriving the mortgagor of the number or the kind of chattels referred to in the Exemptions Act, and the mortgagor is to be entitled to a choice from the greater quantity of the same kind of chattels which are declared exempt under seizure and sale.

Chattel Mortgage Security Gone.

The effect of the above is practically to wipe out all chattel mortgage security in the Province of Saskatchewan. Even the banks, which were empowered to take chattel mortgages to secure past due debts, are affected by this enactment, which must result in shaking the confidence of the business public and forcing a policy of selling in the Province only on a strictly cash basis. Inasmuch as the Act is retroactive, it really destroys vested interests and amounts to confiscation.

On August 9th last a proclamation issued by the Lieutenant-Governor in Council declared that no personal property, such as live stock and implements belonging to a debtor or in his possession by virtue of a conditional sale, lien agreement, or hire receipt should be seized or sold under a chattel mortgage or under a lien agreement without first obtaining the consent of the Sheriff. In other words, this proclamation makes the Sheriff supreme in his own district and gives him even greater power than the Court, in respect to seizures and sales under a chattel mortgage or lien agreement. Whenever he gives his consent the sale must be made by himself or his assistant, and he is authorized to charge certain fees therefor.



Look up, man! The answer is in front of you.

Take another view of this important subject of cost-cutting in your plant.
Get new ideas on the basis of all costs — your power and lighting.

Many a Toronto manufacturer is sitting deep in his office desk at this minute poring over sales statistics and production records and trying his level best to save the profit margin from sliding to zero.

All he has to do is lift his eyes and let his vision rest on the Hydro wires running past his window to get a suggestion that is saving other manufacturers hundreds of thousands of dollars every year.

The way to employ it is to have a Hydro Engineer call and investigate your power plant and your lighting facilities, and suggest ways and means to save money. He won't bother with theories or possibilities. He will deal with cold, hard, money-saving facts, and you'll get a report that should be worth more real money than you'd care to throw away in a month.

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226 Yonge

Phone Adel. 2120

He will sell, of course by public auction, for whatever the article will bring, and the expectation is that the sale, being a forced one, will frequently fail to realize more than enough to pay the Sheriff his fee.

What is Paid First.

Following this, a pamphlet issued by the Saskatchewan Department of Agriculture, last month, entitled "How Debtors and Creditors May Co-operate," advises farmers, who are unable to pay all their debts, to give preference to such items as wages, threshing, taxes, groceries, twine, rent, blacksmith and repairs, interest on mortgages, etc. If after these liabilities are discharged there is anything over it is quite in order for the farmer to liquidate his debts for lumber, machinery and live stock. It is to be remembered, of course, that this is simply advice, not law, but it shows the disposition of the Government to subordinate the rights of lumber and implement manufacturers to those of other business interests.

Having in mind the extent to which the West has been developed by the credit of Eastern manufacturers, it would seem to be very unwise, to say the least, for any Western Legislature to force the manufacturers of implements into a position where they could not safely do business on any other basis than one of strict cash. When in addition, however, the Legislature goes further and really wipes out the security which the implement manufacturers have accumulated over a period of years, at great expense to themselves, it is surely time that an effort be made to have the legislation disallowed at Ottawa. If such legislation is allowed to stand, it is reasonable to suppose that Manitoba and Alberta will sooner or later follow suit, and that the form of confiscation above referred to will be followed by forms still more drastic.

Municipal Licensing Systems.

Under the Municipal Acts of some of the provinces, particularly in the West, power is conferred upon municipalities to impose what are really prohibitive taxes on firms from outside the province, endeavoring to sell an article to a consumer within the province. These powers are granted under the guise of police regulations, but have every appearance of being a violation of the spirit of the British North America Act, in that they unduly interfere with internal trade and commerce.

RUSSIAN TRADE HINTS.

By R. R. McCORMICK, in *Manufacturers' News*.

Learn the language of the country. It is not insurmountable.

It is difficult to do much business through an interpreter. An American bank is badly needed.

Be prepared to take meals frequently. You can't sell a box of cigars to a customer without first taking a meal with him.

Russia feels that it has thrown off the commercial serfdom of Germany and wants to do business with other countries upon an open door basis.

Russia won't be a successful manufacturing country within the history of our children or grandchildren.

Russia is larger than North America and the largest block of unexploited commercial territory in the world.

Russians cling tenaciously to Russian customs. They won't adapt themselves to our language, weights and measures or money.

A well organized selling corporation is the most practical method of acquiring trade from the Russian end.

There is a great demand for every line of manufactured articles.



MR. H. T. MELDRUM

The Canadian Manufacturers Association has granted indefinite leave of absence to Mr. H. T. Meldrum, Assistant Secretary and Secretary of the Montreal Branch, to enable him to serve the Purchasing Department of the Canadian Pacific Railway Company during the war. Mr. Meldrum is now in London, England.

HARNESSING CANADIAN INDUSTRY TO WAR.

"I think one result of Sir Robert Borden's visit will be to harness Canadian industry, as it has not been hitherto, to the fighting forces of the Empire. The Dominion will emerge from the present condition endowed with a greater strength as a nation exercising a real and ever-increasing influence within, we hope and believe, a more glorious, united Empire."

A Press interview given to the *Daily Telegraph*, of London, England, by Mr. R. B. Bennett, M.P. for Calgary.

HOW TO FINISH LUMBER.

The Hon. the Minister of Lands of British Columbia, announces the publication of another booklet in the series of pamphlets issued for the information of lumber consumers throughout the world. Entitled "How to Finish British Columbia Wood," the pamphlet places before architects, builders, wood-finishers, and home-makers the possibilities of the various native woods when used as interior finish. Instructions for the surfacing, staining, varnishing and painting of such woods as western hemlock, Douglas fir, red cedar, spruce, mountain pine, and tamarack are given, and attractive illustrations show some typical interiors, in office, home, and public building construction. The information given in this booklet is intended to be of real value to home-builders and others interested in wood-working, and advantage should be taken of the opportunity to obtain a copy.

The booklet will be mailed free of charge upon application to the Forest Branch, Victoria, B.C.

WINNING THE MEN.

Suggestions for Talk by Foreman at the First Meeting with His Workmen.

(From a Bulletin Distributed by the National Safety Council of the United States.)

1. The manager of this company has told you about the campaign for safety which has been started in this plant. He has told you that the company is willing to go to the limit in building guards and has asked you to do your part by giving the company your hearty co-operation.

2. This safety campaign is no fad, no joke, but is a serious business. It means the saving of men from being killed or injured.

3. Now we want to make our department the banner department of the shop—we want to do everything in our power to eliminate accidents.

4. This means that we must all pull together. I must do my part as foreman, you workmen must do your part.

Need of Care Emphasized.

5. Every man in this department has three things to do in this campaign for safety: Be careful to protect himself; be careful to protect his fellow-workmen; report any dangerous place or any dangerous practice which he sees.

6. I do not want any of you men to feel backward in reporting dangerous places or dangerous practices. The more points you report the better the company will like it. I do not want any man to feel sore or hurt because some other workman has reported that he is doing something which is dangerous. No man who deserves the name of a man will let his pride blind him to his duty in this work of saving human life. I want to tell you of some of the dangerous practices which I have noticed lately in this department. (Outline dangerous practices.)

Workmen's Committee.

7. You all know that a committee of workmen has been appointed to make inspections of the entire shop and to report to the superintendent. I hope that, in the future, each man in this department will be honored by receiving an appointment on this committee. I hope that if you are appointed that you will do your duty. In the meantime I want to urge every one of you to give the members of this committee all the help you can. Don't laugh at them. Don't ridicule them. Don't treat them as outsiders who are interfering with your business. But treat them as friends, and recognize them as men who are trying to do an important piece of work to save human life.

8. You remember the manager has said that the company will build every practical guard which the foreman or workmen will suggest, but the building of these guards will do no good unless you men use them. Remember that every guard covers a point where you may be injured. Use the guards—you must not remove them. Remember you are the ones to be directly benefited.

Bulletin Boards.

9. Bulletin boards have been placed in each of the departments. It is proposed to post on these bulletin boards, from week to week, pictures of injured workmen, stories of accidents, information in regard to accidents, etc. It is our aim to make these bulletin boards as interesting as a newspaper. We will give you men the very best suggestions in regard to how to prevent accidents.

10. The manager has said that our motto is "A Safe Shop." It cannot be a safe shop unless you workmen do your part. The money of the company can only do a small part—the foreman can only do a small part—in making this a safe shop. Two-thirds of the accidents which happen cannot possibly be prevented by any effort on the part of the officers of the company. This will be a safe department if you workmen do your part.

11. Let us all start to work tomorrow morning determined to join this safety campaign and to do everything in our power to help make this a safe department.

A WELL-KNOWN MANUFACTURER.

Mr. James Thomas Cumming, Vice-chairman of the Maritime Branch of the Canadian Manufacturers Association, is well known among the manufacturers of the Maritime Provinces as the Managing Director of J. W. Cumming & Sons, Limited, New Glasgow, N.S. The present business was estab-



MR. J. T. CUMMING

lished by the late J. W. Cumming in May, 1902, and has grown rapidly until a large connection has been built up with Maritime Province firms and also with Western Canada firms. In 1913, when the business was incorporated, Mr. J. T. Cumming received the appointment which he now holds. He is also a member of the New Glasgow Town Council and a commissioner of the New Glasgow School Board.

WOULD REPRESENT MANUFACTURERS IN ENGLAND.

An energetic business man returning to England, after five years' residence in Canada, wishes to represent Canadian firms as buyer or seller. Propositions invited. Address: Henry Parry, 60 Prospect Vale, Wallasey, Cheshire, England.

The Eustis Mining Company are preparing to rebuild their mill which was recently destroyed by fire. The estimated cost of the new work is between \$75,000 and \$100,000.



“Every time these employees ‘see red,’ it costs them money. They know it.”

“We don’t have to do much ‘jacking up’ for tardiness; the card does it for us—24 times a week—or as often as the employee sees it.”

These are the words of an Employer who uses the International Time-card Recording System. He was speaking about the RED registrations which this System enforces if an employee registers “late” coming in or “too early” going out.

“Another thing—the International Time Card practically means that the employee makes up his own time-sheet. The work is done by himself, automatically, every time he registers. He can’t dispute his own figures at the end of the week. Saves all argument, dispute and inspires confidence all round.”

“This International Time-card Recording System,” this employer went on, “has another big saving feature: It stops the large total time loss which occurs between the time the employee ‘punches in’ at the factory door and the time he gets to his bench. This ‘walking time’ is a heavier drain on profits than many an employer realizes. The International stopped all this loss for us.”

Mr. Employer, this represents the concrete experience of every user of an International Time-card Recording System. It is saving thousands of dollars every day for employers throughout the British Empire and the United States.

We strongly urge you to call us in and investigate your pay-roll methods. This costs you nothing and commits you to nothing. We are the largest builders of Time-recording and Cost-recording Systems in the world, and our advice is free. Write us to-day.

The International Time Recording Company of Canada, Limited
TORONTO, CANADA

F. E. MUTTON,
 General Manager

Phone Main 2469

Offices—RYRIE BLDG.
 Cor. Shuter and Yonge Sts.

*"When times are good, time is cheap.
When times are hard, time is dear."*

When your factory was running overtime, and you had to stop your advertising because you couldn't fill your orders, you didn't feel so badly if an occasional employee wasted an occasional hour.



It was bad business then, or any time, but, well "times were good."

Now, in these days when efficiency and economy are the watchwords that must lead us to the promised land of peace and plenty again—what about the time of your employees that you are paying for, every minute of it? Are you getting it—every minute of it? Have you a time-recording system that will do these things:

1. Show every employee in figures of his own making how much of your time he has wasted.
2. Save the big waste in "walking time" from the place of "punching in on the clock" to the bench or desk.
3. Enforce publicity, and a lot of it, at every registration.
4. Leave the employee satisfied with the registration, because it is plainly visible and is known to be unalterable.
5. Give you a practically ready-made payroll at the end of the week.

If you haven't, then the golden minutes are draining away unseen every day and four times a day, and with them your profits, maybe the small margin that makes all the difference between dividends and no dividends, Mr. Manufacturer.

If you would like to become posted on the workings of a System that is designed to stop the Time-leaks in YOUR factory, write us to-day.

The International Time Recording Company of Canada, Limited
TORONTO, CANADA

F. E. MUTTON,
General Manager

Phone Main 2469

Offices—RYRIE BLDG.
Cor. Shuter and Yonge Sts.

METHODS OF REACHING THE MEN AND REDUCING ACCIDENTS

By R. J. YOUNG

Illinois Steel Co. in "Safety First Magazine"

THERE are many ways of reaching the men and reducing the accidents through education. In other words, through building up a spirit which will cause us to think always and consistently of our own and others' safety. We must develop a conscience, a personal responsibility and an esprit de corps which will secure hearty co-operation.

Study a number of accident reports and you will find that about nine out of every ten of them would not have occurred if someone had done some little act or if someone had used a little more care.

We hear a great deal about the necessity of guarding dangerous places, and it goes without saying that all dangerous places should be protected; but accidents caused by dangerous machinery are a mere drop in the bucket compared with the vast number that can be prevented by foresight and care. Before a job of considerable magnitude either in construction or repair work is undertaken, the situation should be carefully canvassed by those in charge and the safest and best way to perform the work decided upon. There are more accidents due to failure to give the work in hand proper consideration, than are due to unguarded machines and they are just as inexcusable on the part of the superintendents.

Organization Needed.

In undertaking an accident prevention campaign we should, of course, first have a comprehensive safety organization consisting of officials and workmen, because if our safety work is going to be a success we have got to make it everybody's job to prevent accidents.

Although Safety Committees are invaluable in promoting "Safety First" education; other ways must be used to that end. We must get into personal touch with the men and keep the subject ever before them.

Starting at the employment office, it is considered a good plan to confront men seeking employment by a sign which tells them that unless they are willing to be careful of their own and others' safety, they should not ask for employment.

Books of Safety rules printed in the various tongues spoken are also of great value, and especially so if examinations are given on the rules after the man has had time to study them. It is a good plan to have these examinations conducted by members of workmen's safety committees. It is also an incentive to the men to study the rules, if they are given a "Safety First" button when they show a proper knowledge of the safety requirements.

Illuminating signs, stereopticon and moving pictures at the plant entrances displaying Safety subjects and Safety precepts have been found to be a practical method of awakening interest, and the safety views and reminders cause many a man to think of "Safety First" as he passes on to his work.

In some plants when new men are employed, a notice is sent to the Safety Inspector or to a Safety Committee, under whom men who are versed in the intricacies of foreign tongues are employed, and who call upon the foreman to whom the men have been sent and in conjunction with him talk to the men about their duties and about being careful in their work, and how to avoid injuries. When men are spelling off, or at lunch hour when the men are in groups, the "Plant Preacher" improves the opportunity of preaching on "Safety First."

Another scheme is to have each foreman appoint some one of his men as a Safety Overseer. In addition to his regular work, this man is also on the alert for dangerous conditions, and practices, reporting the same to his foreman. The man selected to fill this position is given a distinctive badge. It has also been found to be beneficial to have monthly meetings of all Safety Overseers to discuss safety matters.

Use of Bulletin Boards.

One of the best methods of keeping the Safety subject alive is placing on plant roadways and in departments, one or more bulletin boards and displaying upon these boards material which will keep the men interested in accident prevention. Among other things should be photographic stories of accidents, narrow escapes from accidents, newspaper clippings of accidents, lists of departments in a plant successful in keeping their accidents below a certain percentage, etc. This material should be frequently changed, in order to keep up the interest.

Another practical means of advertising Safety is the distribution of watch fobs and safety trinkets or prizes. For instance, when a department is successful in meeting certain fixed requirements in accident prevention records, during any one month, then each man in that department receives a "Safety First" prize. The Safety requirements, of course, should be based on past records, and the inherent hazards of a department.

We know that the conditions under which we work and our feelings towards our work and our employer have a very material effect—that pleasant surroundings and proper conditions make for better and more careful workmen and a higher standard of citizenship. Doubtless, there is a great deal in the psychology of accident prevention, and the installation of adequate and attractive sanitary equipment is an important factor in building up the esprit de corps which will secure hearty co-operation. I believe it has also been proven that beautifying the grounds and shops with grass plots and flower beds has had a material effect upon the reduction of accidents.

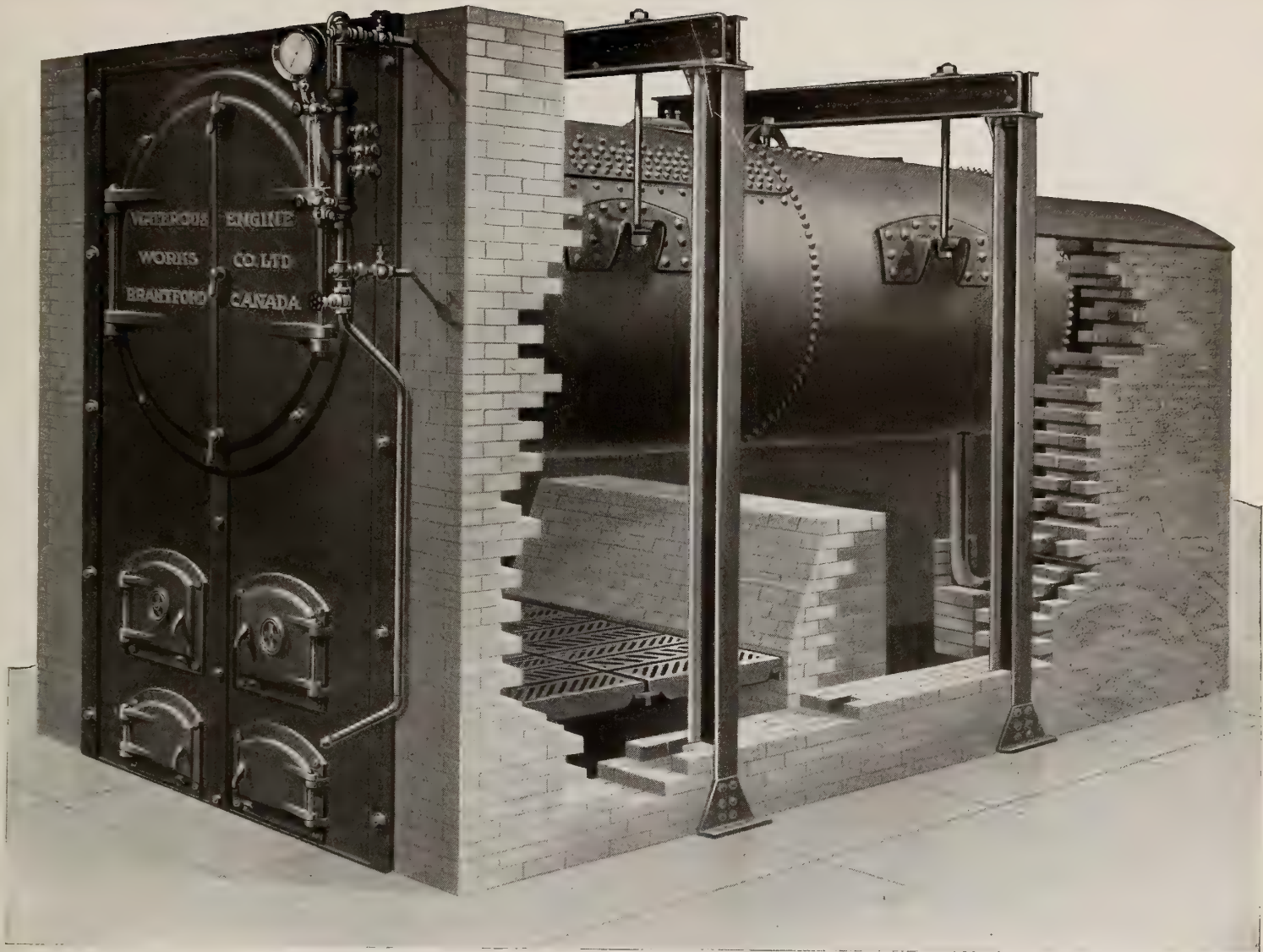
Another means of building up that family spirit is the establishment of clubs and social centres where all may meet on a common ground and learn that those whom they imagined were always "looking for the best of it" are in fact rather decent fellows.

An effort should be made to carry this movement into the homes, schools, and churches. One effective means is to give a banquet and safety entertainment to the clergy, and get them to hold safety services on a given Sunday; also arrange for moving pictures and lectures to the school children and general mass meetings, which can be made attractive and educational through moving pictures and talks by prominent men.

Position of the Employer.

The employer occupies a very responsible position with relation to accident prevention. The power to provide means of education in safety—the power to teach restraint and thoughtfulness for the safety of others, lies in his hands and

(Continued on page 671.)



Waterous Boilers

Clean cut construction and honest workmanship distinguish these boilers. They are built for both power and heating purposes—all a little better than required by law.

Horizontal Return Tubular Boilers—25 to 165 H.P.

Portable Locomotive Boilers—20 to 100 H.P.

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Special and Marine Boilers—all sizes.

If you appreciate economy, convenience and safety in your boiler-room, let your next boiler be "Waterous" built. Our new catalogue, just from the printers, is at your service. No. 506—Ask for it.

The Waterous Engine Works Co., Ltd.
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**ELECTRIC TRAVELING CRANES**

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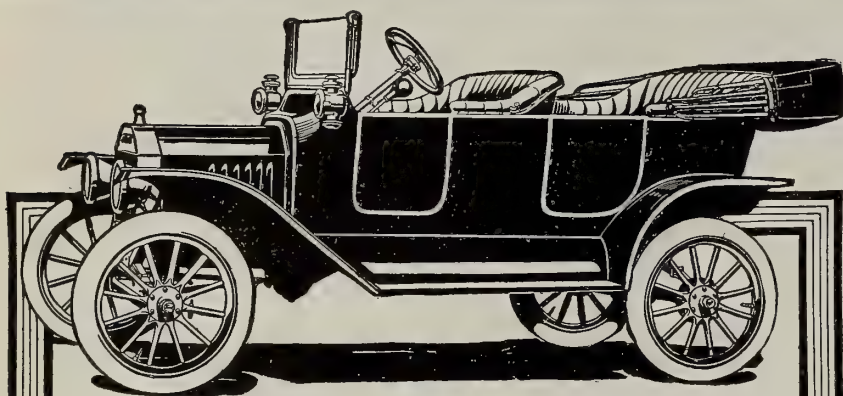
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"MADE IN CANADA"

Ford Touring Car
Price \$530

Ford Runabout
Price \$480

Ford Town Car
Price \$780

The above prices f.o.b. Ford, Ont., effective Aug. 2, 1915.
 No speedometer included in this year's equipment,
 otherwise cars fully equipped. Cars on display and
 sale at Ford Factory, Ford, Ont.

**LOSSES BY FOREST FIRES.**

The total amount of standing timber in the United States is nearly 2,900 billion board feet. At least 76 per cent. of this, or 2,200 billion feet, is privately-owned. About 21 per cent., or 600 billion feet, is in the National Forests. About 3 per cent., or 90 billion feet, is in some other form of public ownership—Federal, State, or municipal. The original stand of timber in the United States has been roughly estimated to have been 5,200 billion feet, covering approximately 800,000,000 acres. Fire has destroyed at least as much of this as lumbering has utilized. As much again has been wasted.

The amount of merchantable saw-timber in Canada has been roughly estimated at 600 billion board feet, exclusive of a vast amount of pulpwood, the extent of which has not been estimated. Thus, Canada has probably between one-fifth and one-fourth as much timber as the United States. Undoubtedly the amount of timber in Canada uselessly destroyed by fire is several times as great as the amount that has been utilized. However, the fire loss is being materially reduced by the exercise of greater precautions on the part of governmental agencies and of lumbermen. The outlook for the practice of forestry in Canada is vastly improved by the fact that the fundamental ownership of a very large percentage of non-agricultural lands has been retained by the Crown, instead of passing into private ownership, as has so largely taken place in the United States. Very seldom can private landowners afford to hold cut-over forest lands for successive crops of timber. This is essentially a governmental function, on account of the long-time element involved.—*Conservation.*

The D. J. Barker Foundry Company, Limited, are building a brick foundry costing \$13,000 in Brighton, Ontario.

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The undersigned is prepared to represent one or more first-class Manufacturing Firms, in the City of Hamilton. Extensive acquaintance with Merchants and Manufacturers. Excellent references furnished. (Member Board of Trade and Ex-Secretary, Hamilton Branch, Canadian Manufacturers' Association.)

C. A. MURTON

HAMILTON, ONT

METHODS OF REACHING THE MEN AND REDUCING ACCIDENTS.

(Continued from page 668.)

he should realize that he cannot, even if he would, shift the burden of responsibility.

I am not belittling the responsibility of the employee in accident prevention but the lead must be taken by the employer. In the stress of business—in the hurry for production, a great deal depends upon the attitude of the employer and his agents. It is necessary that he have a sincere desire to prevent accidents and that he be willing to make some sacrifice to accomplish that end. It is not sufficient that he wishes there were no accidents; that he is sorry the workmen are so careless—but he should point out the way; he should lay out the plan of campaign; he should build up that feeling of personal responsibility or conscience which will make every man feel that the success of the work largely depends upon his own efforts.

We condemn a man who carelessly injures another, but we know he would not have done it had he stopped to think—he did not feel that personal responsibility or have that conscience which would have prevented the accident. We should teach them to think. We cannot do it in a week, or a month, and we cannot do it by merely installing safety devices and telling them they must be careful. They know that they should be careful just as well as we do—when they stop to think. We should reach them in other ways. Not by preaching—they hear enough of that—but by building up that atmosphere around the works and carrying it so far as we can into the homes.

If we could eliminate those accidents due to carelessness, we would save more than 32,000 people from violent death and over 1,600,000 from serious injuries every year in this country.

FAVORABLE TRADE BALANCE WILL CONTINUE.

Canada to Provide for Foreign Debt Charges Out of Income—Change Predicted Has Happened.

Canada may be likened to a young man, energetic, ambitious, and in possession of an extremely valuable but unimproved estate, for the improvement of which much capital is needed. To complete the analogy we must picture a parent willing to lend all the capital necessary for the development of the estate. During the period of construction the young man has been taking care of the interest charges on his indebtedness readily enough through the contraction of new loans. Obviously our young man cannot permanently overlook the fundamental consideration that his construction expenditures must be justified in the end through an increased production of wealth proportional to the investments. That is, he must provide eventually for foreign debt charges from current income and not as heretofore from capital account, suggests Professor T. H. Boggs, of Dartmouth College, in an article on "Capital investments and trade balances within the British Empire," in the *Quarterly Journal of Economics*.

Canada's Balance Sheet.

After an analytical study of imports and exports and finances, in which the figures contained in "Capital Investments in Canada," published by *The Monetary Times*, are used, Professor Boggs compiles an approximate balance sheet of Canada, in which the figures represent annual averages for the period 1911 to 1913 in millions as follows:—

Visible Exports and Imports:

Exports and imports of merchandise, including bullion:
Average excess of imports \$239

Average annual excess of "visible" imports \$239

Invisible Exports and Imports:

New capital imported and interest payments payable abroad: average net inflow \$175

Capital carried into Canada by immigrants and out by emigrants: average net inflow 80

Payments effected through the issuance of money orders: average net outflow 24

Payments on account of ocean freights and earnings of Canadian ships; expenditures in Canada by tourists, etc., and abroad by Canadians: estimated to balance,

Average annual net inflow (i.e., "invisible" import) 231

On account of the great increase in the rate of flow of British and American capital into Canada during the past decade, Canadian imports have grown at a faster rate than exports. This situation, however, cannot persist indefinitely. In the not distant future the present disparity in value between exports and imports must shrink, then disappear, and later be followed by an excess of exports. (Already this change has taken place owing to Canada's increased production and the conditions produced by the war.—Editor, *The Monetary Times*.)

Excess of Exports will Continue.

Professor Boggs concludes by intimating that for an indefinitely long period thereafter the Canadian trade balance will be marked by such an excess of exports. This expected change in the balance of Canada, similar to that which occurred in the United States trade balance about 1873, may ultimately give way, in turn, to a further readjustment of exports and imports. Although as yet there are substantially no Canadian investments abroad, it is not inconceivable that here too the experience of the United States may in the end be repeated in Canada. But speculation of this sort goes beyond anything indicated in the present situation.—*Monetary Times*.

FORM AMERICAN CHAMBER OF COMMERCE OF CHINA.

The organization of the American Chamber of Commerce of China has been completed by the adoption of constitution and by-laws for the body at a meeting of American business men in Shanghai.

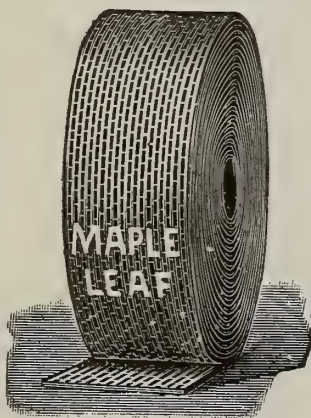
NEW BRUNSWICK TO TAKE ACTION.

Survey of Crown Lands to be Proceeded With.

The Government of New Brunswick has announced that in the near future it will appoint a provincial forester and proceed with the survey of Crown timber lands, as provided for in the Act of 1912. The Crown lands comprise an area of over ten thousand square miles, or approximately one-third the total area of the province. The proposed action is entirely logical, in view of the fact that the province derives an annual revenue of over half a million dollars from these lands. A careful stock-taking, together with a thorough and scientific investigation of the questions of reproduction and rate of growth, will be required to determine the means necessary for the perpetuation of the forest and of the revenues resulting from its exploitation.—*Conservation*.

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The best on the market for TRANSMISSION OF POWER. CONVEYING, etc.

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THOS. C. IRVING, Gen. Man. Western Canada, Toronto

REINFORCEMENTS FOR THE PRINCESS PATRICIA'S C.L.I.

The Universities of Canada have now for some time been working loyally together to reinforce that gallant regiment, the Princess Patricia's Canadian Light Infantry. Three companies have already gone oversea, numbering nearly 900 men, and a fourth company is now under formation at Montreal.

The University Companies are now known throughout the length and breadth of Canada, so that there is a continuous flow of men of the right type to Montreal. Not only do such men find entry to a famous regiment, but they are rapidly equipped and trained and sent without delay oversea to England, where they are comfortably billeted in huts at an excellent camp near the sea on the south coast of England. Moreover, the men secure the great advantage of good comradeship with congenial spirits of similar tastes and antecedents.

The first company, under a notable officer, Captain Gregor Barclay, has been declared by regular officers of experience to be second to none compared with any company of any army in the world.

The second company was raised over-strength in seven weeks by Captain G. McDonald and Captain Percy Molson. Both companies are now in France.

The third company sailed eighty over strength because the newspaper publishers of Canada were good enough to make known, through their columns, that the company was being formed. This resulted in such a rush of recruits that it was necessary to apply to the Militia Council of Ottawa for a special authority to increase the strength from 250 to 330 men. Each man before embarkation writes to a friend who is a likely recruit and tells him of the advantages of the University Company, so that even before the men have disembarked a fresh company is assembling on the McGill Campus at Montreal.

Recruits are examined locally by an army medical officer and are attested by a magistrate in the nearest city, after which an application is made for transportation, which is speedily furnished from Montreal.

This system is effective and rapid and free from red tape. There are in nearly every city representatives of the various universities, who are always ready to help forward the good work and to give information to men anxious to enlist.

The regulations respecting enlistment, pay and separation allowances are precisely the same as those for other Canadian troops.

At Montreal the University lends buildings for barracks and the campus for drill ground. Affiliation with the McGill Officers Training Corps is a great benefit, and interesting tactical work is carried out on the slopes of Mount Royal.

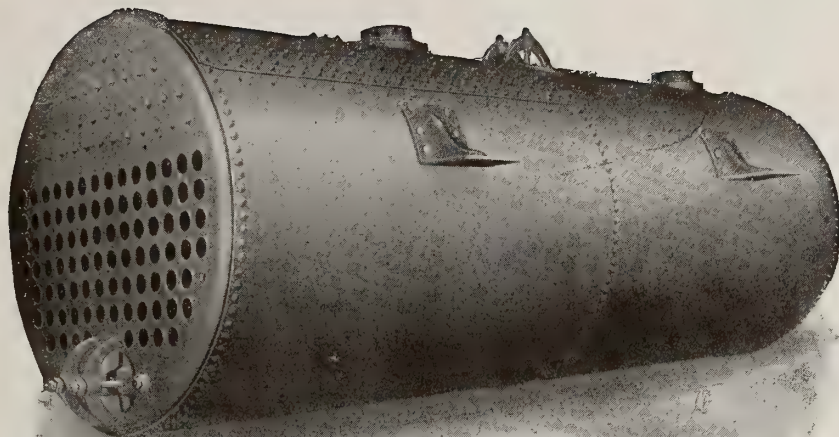
There is competent instruction in tactics, musketry, bayonet fighting and trench making. The C.P.R. is kind enough to lend their gallery for shooting practice. A machine gun is available and signalling, now of immense importance, is also taught.

All information can be obtained from Capt. A. S. Eve, 382 Sherbrooke Street West, Montreal, the headquarters of the successive companies, or to Capt. E. J. Kylie, Mining Building, University of Toronto.

SCHWAB GETS CONTROL.

Control of the Baldwin Locomotive Works in Philadelphia has been obtained by Chas M. Schwab, of the Bethlehem Steel Company and the Dupont Powder interests, according to apparently well authenticated reports here.

BOILERS



STANDARD RETURN TUBULAR BOILER

We make boilers of all kinds for any service.

We are also sole Canadian makers of Erie City Water Tube Boilers, Vertical and Horizontal.

The large number of pleased and satisfied owners of "INGLIS" Boilers is our best advertisement.

For (52) fifty-two years our boilers have been the standard. We have installations of our different types of boilers, which our representatives will be pleased to show to prospective purchasers. Write us for prices, etc.

INGLIS' PRODUCTS ARE "MADE-IN-CANADA"

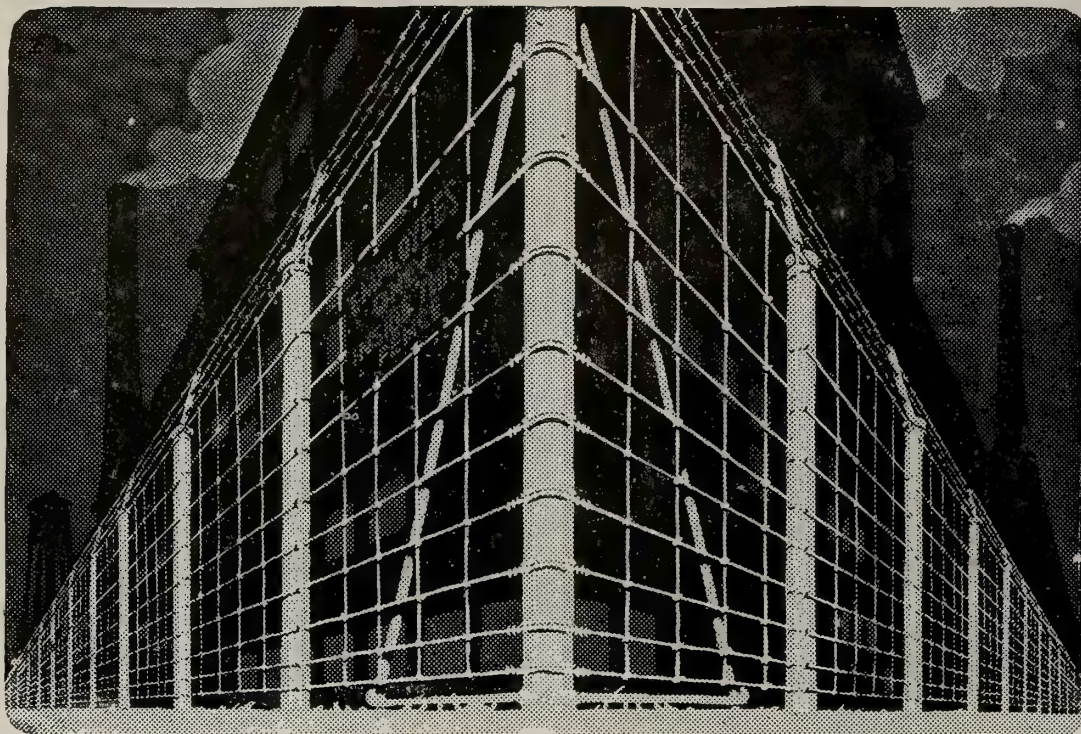
The John Inglis Company, Limited

ENGINEERS AND BOILERMAKERS

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Toronto, Canada

Ottawa Representative: J. W. ANDERSON, 7 Bank Street Chambers



Surround Your Factory with this “KEEP OUT” P R O T E C T I O N

¶ Every factory in Canada making munitions needs protection against trespassers. ¶ The Government insists on this protection being provided in plants exposed to extra danger. ¶ Lack of this protection explains some of the “unexplained accidents” that have had brief mention in the newspapers. Will you be awakened some night to receive a telephone message that “something has happened at the plant”?—Or will you to-day—right now—decide to give protection against “accident”?

STANDARD STEEL TUBE FENCE POSTS

With Standard Wire Fencing and
Barbed Wire Parapet—(Steel Tube Gates)

¶ This equipment is ideal for the purpose. ¶ On request we will give the responsible officers of Shell Factories names of other concerns who have installed Standard Protection. Ask *them* about it. ¶ They will tell you it costs less money and time to erect—is neater in appearance—more effective and in every way the superior of any other factory protection. ¶ Largely reduces the number of guards required. ¶ Can be charged with high-voltage electricity if required.

Send this Coupon to-day for particulars, price and names of users.

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MEMO. TO WRITE

*Standard Tube & Fence Co. Limited Woodstock
re Factory Fence Protection for Ammunition Factories.*

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JULIUS COHEN & JOSEPHY

BRADFORD TOURCOING BOSTON

FOREIGN WOOL DOMESTIC

Also Wool, Mohair, and Silk Noils, Wastes, Shoddies, etc. Carbonized Crossbred Noils a specialty.
We carry in TORONTO at all times the largest stock of Foreign Wools in Canada. *Write for prices to*

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Acid Open Hearth Steel Castings
for all purposes

Dominion Steel Foundry Company, Limited

Annual Capacity 15,000 Tons

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PIONEERS OF CANADIAN MADE KRAFT PAPERS

17-19 St. Therese Street - - - - MONTREAL

We carry large stocks of Kraft Rolls and Sheets, Brown and Colors—Can supply all grades of paper,
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Agents:—Mansfield Co.'s Watershed Waterproof Papers and Trotter's Scotch
Fine Writing and Printing Esparto Papers.

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Always uniform.

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Special Woodworking
Garnet Paper and
Cloth

WORKS:

105-131 Jefferson Avenue
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THE CANADIAN BANK OF COMMERCE

SIR EDMUND WALKER, C.V.O., LL.D., D.C.L., President

JOHN AIRD
General Manager

H. V. F. JONES
Ass't General Manager

CAPITAL PAID-UP, \$15,000,000
RESERVE FUND, \$13,500,000

Extension of Canadian Trade

The Bank will make enquiries into the possibilities and requirements of markets abroad for exporters or importers who desire to extend their trade with British colonies or possessions. Owing to the large number of its correspondents and agents it has unusual facilities for this work.

THE ROYAL BANK OF CANADA

Incorporated 1869

Capital Authorized . . . \$25,000,000
Capital Paid up . . . \$11,560,000
Reserve & Undivided Profits \$13,000,000
Total Assets . . . \$180,000,000

HEAD OFFICE, MONTREAL

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Branches in every Province of the DOMINION OF CANADA and in NEWFOUNDLAND; in HAVANA and throughout CUBA, Porto Rico and Dominican Republic; BAHAMAS, Nassau; BARBADOS, Bridgetown; JAMAICA, Kingston; TRINIDAD, Port of Spain and San Fernando; BRITISH HONDURAS, Belize.

LONDON, ENG., OFFICE—Princes St., E.C.

NEW YORK AGENCY—Corner William and Cedar Sts

Savings Department at All Branches

GROWTH OF GREAT BRITAIN.

Interesting statistics regarding the trade and commerce of the United Kingdom and the condition of the people are given in the following Board of Trade return issued recently:

In 1881 the population was 27.4 millions; last year it was 46.1 millions.

Since 1871 the death rate per 1,000 has dropped from 21.5 to 14.14 in 1914; the birth rate has dropped from 33.8 to 23.9.

There were in 1861, 1,054,099 paupers, representing 364 per 10,000 of the population; last year the number was 925,626, or 201 per 10,000. But the total annual cost of poor relief in the period has risen from £7,058,000 to £17,941,000.

The gross income brought under review for taxable purposes was:

In 1861	£312,000,000
In 1913	1,167,184,000

A penny on the income tax represented:

In 1861	£1,162,250
In 1913	3,108,809

The amount standing to the credit of post-office and trustee banks was:

In 1851	£30,278,000
In 1915	273,750,000

An enormous jump has been made in clearings at the London Bankers' Clearing House:

In 1871	£4,826,034,000
In 1913	16,436,404,000

Last year, as a result of the war, the figure dropped to £14,665,048,000

Net imports of merchandise (deducting re-exports) were:

In 1861	£182,955,000
	(Or £6 6s 6d per head).
In 1913	£425,245,000
	(Or £14 8s 5d per head).

Total exports of the produce and manufactures of the United Kingdom were:

In 1851	£74,448,000
	(Or £2 14s 4d per head).
In 1913	£425,245,000
	(Or £11 9s 10d per head).

The price per stone of 8-lb. of fine quality beef, was:

In 1851	3s 2½d
In 1914	5s 5d

British shipping has grown enormously. The total registered net tonnage last year was 12,415,204, as compared with 3,662,344 sixty years ago. The tonnage entered and cleared in the foreign trade at ports in the United Kingdom was 93,249,573, in 1913, ten times as great as in 1851. Foreign shipping cleared represented 71,560,008 tons two years back, whereas sixty years ago it was only 6,159,323.

NO UNION RELATIONS WITH GERMANY.

The National Order of Paper Workers of the United Kingdom has taken the initiative among British trades unionists in refusing to maintain relations with German and Austrian labor federations. The decision was taken in connection with an invitation to a conference in Switzerland with the object of reviving the international organization of trades unions.



MANY Foreign Brushes have been imported for use by Canadian Factories and Consumers—in many cases due to the erroneous impression that Brushes of their special class could not be made in Canada. We make a line for every known use, including Special Machine and Factory Brushes, etc., their quality and values being much better than the imported article.

Your help either directly or indirectly to have more Brushes made in Canada, by Canadian Workmen, will be beneficial to this Country and to all concerned.

The Boeckh Bros. Company, Ltd.

Toronto - Canada

BROWN BROS., LIMITED



Manufacturers of

ACCOUNT BOOKS

Loose Leaf Ledgers, Binders, etc.
Leather Goods, Diaries, Paper,
Stationery, Office Supplies

OFFICE AND FACTORY - - TORONTO
SIMCOE, PEARL AND ADELAIDE STS.

Goold, Shapley & Muir Co.

LIMITED

BRANTFORD : WINNIPEG : REGINA : CALGARY

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GAS AND GASOLINE ENGINES

TANKS
AND
TOWERS
FOR
Sprinkler
Systems

TOWN WATER
SUPPLY
ETC., ETC

PUMPS
CONCRETE
MIXERS

HOISTS, Etc.

Write, if interested





Canadian Manufacturers

OF

OVERALLS, SMOCKS

Working Shirts

House Dresses, Nurses' Uniforms, Children's Frocks

and other garments of this class can put more value into their products, without increasing costs, by using

Dominion Textile Drills and Galateas

instead of imported fabrics. Our cottons, "Made in Canada," carry no duty—give more value at a price than any imported goods—and are the logical raw materials for "Made in Canada" garments.

Dominion Textile Co.

Limited

Montreal—Toronto—Winnipeg

Operating Twelve Mills; Employing Ten Thousand People.

Manufacturing White and Grey Cottons, Prints, Sheetings, Shirtings, Pillow Cottons, Long Cloths, Cambrics, Ducks, Bags, Twills, Drills, Quilts, Bureau Covers, Towels and Towelling, Blankets, Rugs, Twines and many other lines used by Manufacturers in Rubber and other Trades.

PROTECTION COMING IN BRITAIN.

The old Manchester school of politicians was all powerful in its day. It was the outcome of the rise of the middle classes to political power in Britain, in England more particularly. Up till 1830 the middle classes in England had practically no say in the government of the country. Then they made their voices heard and influence felt. The middle classes in Britain represent, for the most part, the middlemen in business, the men who make their living by purchasing the products of the factory and reselling them to the retail shop-keepers. So long as the markets of a country are protected the middleman is restricted to a legitimate percentage of profit. Labor demands a fair wage and the consumer will not pay more than he can afford, or at all events buy more than he can afford, and so prices are kept reasonably moderate, commensurate with the just remuneration of labor. The Manchester school of politicians set themselves the task of cutting the price of labor, and the only way they could do so successfully was to bring in the products of foreign labor, and this was done through unrestricted importations into Great Britain of the surplus products of foreign manufactories. The middlemen in Great Britain have prospered and waxed mighty as the result of this policy. All the millionaires nearly of the last fifty years have been middlemen who bought in the cheapest market and sold in the dearest. Many of the British industries have gone to the wall because of the encouragement of cheap foreign-made goods, and Germany gained the financial strength she enjoyed through protecting her own workingmen's labor while under-selling the labor of the British workingman. One of the outcomes of the war will be to bring the British workingman into his own, to do away, practically for ever, with unrestricted free trade, and to substitute therefor fair trade on a basis of tariff reform. This is assured. Cobdenism is on its deathbed and will not survive the war. Mr. Joseph Chamberlain was the prophet of the new school of tariff reform, and his prediction will as assuredly come true as his prediction of the action of the British Dominions in the event of a great war such as the present.—*Charlottetown Guardian*.

INQUIRY INTO OCEAN TRANSPORTATION FACILITIES AND RATES.

At the request of the President of the United States the Interstate Commerce Commission will make a thorough and extensive investigation of ocean transportation facilities and rates between the United States and foreign countries. The Treasury Department and the Department of Commerce will co-operate with the Commission in making the enquiry, which will develop the actual situation regarding ocean transportation at the present time and its effects upon American foreign trade.

The investigation will cover all phases of ocean commerce with particular reference to the trade with South and Central America and the principal countries of Europe. The Commission will ascertain, through reliable and impartial sources, what kind of steamship service exists between United States leading ports and the leading ports of South and Central America and those of Europe, and how it compares with the service as it existed before the European war broke out; what were the rates for passengers and cargo prior to the outbreak of the war and since; and what is the effect of present shipping conditions upon foreign commerce.

The inquiry, it is stated, is in aid of the scheme to establish an American merchant marine under Government ownership if not Government operation.

The report of the Commission will be of interest to Canadian exporters and importers both via Canadian and United States ports.

L. W. MANCHEE, President

W. P. BENNETT, Vice-President

RUDD PAPER BOX CO., LIMITED

374 RICHMOND ST., W.
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THE NEW MANAGEMENT SOLICITS CORRESPONDENCE ON
SET UP AND FOLDING PAPER BOXES OF ALL KINDS
:: :: MAILING TUBES, ETC. :: ::

THE CANADIAN APPRAISAL COMPANY LIMITED

TORONTO
ROYAL BANK BLDG.



NEW YORK
55 LIBERTY ST.

HEAD OFFICE : 4 HOSPITAL ST.
MONTREAL

THIS is a year in which investment costs, values and depreciation will have more significance and will receive greater attention than ever. It is an opportune time for you to know exactly what your plant is actually worth as a going concern.

This can only be known by having an appraisal of your properties.

Our appraisal and continuous service will be of great practical value to you as a standard work of reference in the operation of your business by establishing a sound, authoritative basis of costs and values for operating, accounting, cost finding, taxation, insurance and financial purposes.

The Canadian Appraisal Company, having appraised over 1500 properties in Canada, is in a unique position to understand and meet your requirements.

Valuations for
MUNICIPALITIES - PUBLIC UTILITIES - RAILWAYS



MADE IN CANADA

Canadian Hart Wheels

CUT FASTER LAST LONGER

Than any other wheels on the market

Tell us the service you want performed and we will supply you with an abraser that will save you time, money and worry.

Send for one of our catalogues and tell us your troubles. We do the rest. :: :: :: ::

CANADIAN HART WHEELS LIMITED

450 BARTON ST. EAST

Hamilton :: :: :: Ontario

ESTABLISHED 1850.

DID YOU EVER NOTICE

that jarring, grinding noise in your machine shop caused by the metal gears?

Wouldn't you like to stop that noise? You can do it by using

NEW PROCESS GEARS RAWHIDE PINIONS

They last indefinitely too.

Ask us about it.

R. GARDNER & SON, LIMITED

**Nazareth, Brennan and Dalhousie Streets
MONTREAL**

NEW COMPANIES.

The following companies have been recently incorporated in Canada for manufacturing purposes:

The Cecilian Co., Ltd., Toronto, Ont., piano players; capital, \$50,000.

Galibert Glove Works, Ltd., Montreal, Que.; capital, \$90,000.

T. & K. Industries, Ltd., Montreal, Que.; mechanical engineers, tool makers, etc.; capital, \$50,000.

Canada Cheese Box Co., Ltd., Ottawa, Ont.; capital, \$90,000.

Luckett Loose Leaf Co., Ltd., Toronto, Ont.; capital, \$40,000.

Zinc Co., Ltd., Sherbrooke, Que., smelters and refiners; capital, \$100,000.

Flexible Metal Hose Co., Ltd., Ottawa, Ont., railway equipment; capital, \$200,000.

The Lang Shirt Co., Ltd., Berlin, Ont.; capital, \$100,000.

Russell Fire Proofing, Ltd., Russell, Ont.; capital, \$250,000.

The Patent Grates Co., Ltd., Sorel, Que., treat cast iron, smelt iron, hard steel, brass, copper or other metals; capital, \$50,000.

Excel Chemical Co., Ltd., Montreal, Que., explosives; capital, \$1,000,000.

La Compagnie d'Appareils Automatiques, Ltee., Montreal, Que., automatic machines; capital, \$200,000.

British American Chemical Co., Ltd., Montreal, Que.; capital, \$50,000.

Everyman's Car Co., Ltd., Ottawa, Ont.; capital, \$40,000.

The Magic Wall Paper Remover Co., Ltd., Toronto, Ont.; capital, \$40,000.

The Capital Electric Co., Ltd., Ottawa, Ont., iron founders, electrical engineers, etc.; capital, \$40,000.

The Newmarket Metal Toy Mfg. Co., Ltd., Newmarket, Ont.; capital, \$40,000.

Universal Measuring Devices, Ltd., Toronto, Ont.; capital, \$50,000.

"Dr. J. O. Lambert, Ltee.," Montreal, Que., chemicals, drugs and proprietary medicines and pharmaceutical products; capital, \$250,000.

Alberta Flour Mills, Ltd., Calgary, Alta.; capital, \$5,000,000.

London Art Woodwork Co., Ltd., London, Ont.; capital, \$40,000.

Bee Confectionery Co., Ltd., Toronto, Ont.; capital, \$50,000.

Northern Miner Press, Ltd., Cobalt, Ont.; capital, \$40,000.

Burnall, Ltd., Toronto, Ont., lighting and heating plants, fuel savers and smoke consumers; capital, \$100,000.

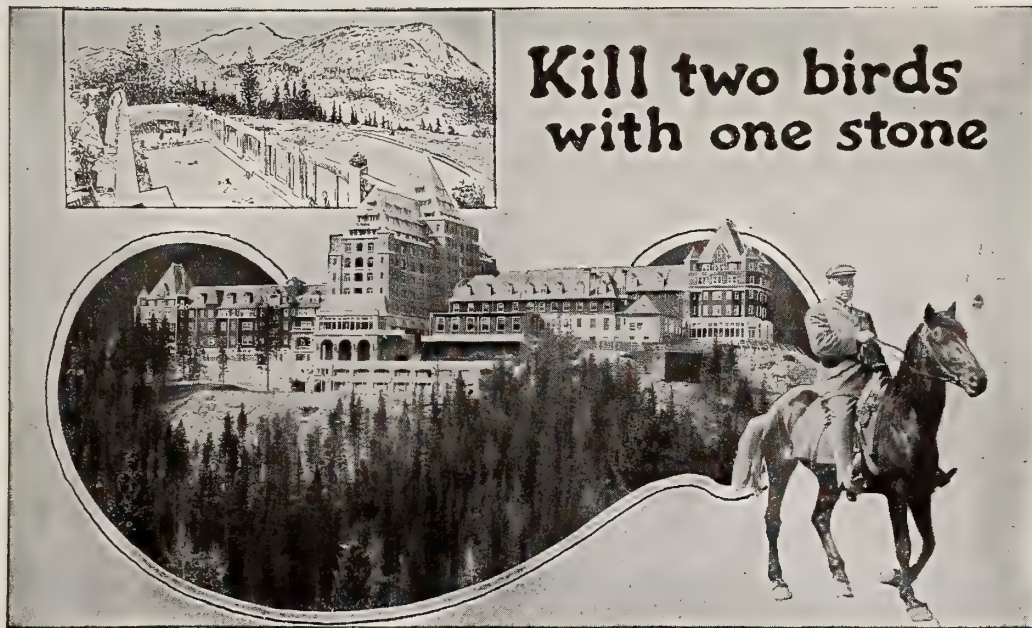
The Thompson-James Co., Ltd., Toronto, Ont., explosives, gunpowder, nitro-glycerine, dynamite, gun cotton, etc.; capital, \$40,000.

Pullman Motors, Ltd., Toronto, Ont.; capital, \$100,000.

Western Shells & Box Co., Ltd., Edmonton, Alta.; capital, \$25,000.

INQUIRY FOR EMPTY DRUMS.

Mr. W. H. Harvey, of the Dominion Creosoting Co., Limited, Vancouver, B.C., has written to INDUSTRIAL CANADA stating that he has from 4,000 to 5,000 empty drums in which his company has received shipments of creosoted oil from various European sources. These drums are of steel, hand rivetted, of ninety imperial gallons capacity and fitted with two screw bungs. The company is unable to secure further drum shipments, as Belgium was the main source of supply and, thinking that some commodity which is being manufactured in Canada for shipment to the Allies could be contained in these drums, he is offering them for \$5 each f.o.b. Vancouver, which is considerably less than cost price.



and travel via THE

CANADIAN ROCKIES

to the

PANAMA PACIFIC EXPOSITION

If you are planning your 1915 trip to San Francisco, make sure your ticket reads via Canadian Pacific, otherwise you will miss the grandeur beauty of nature's most stupendous works—The Canadian Rockies.

BANFF LAKE LOUISE FIELD GLACIER

Are important tourist stop-over points on the Canadian Pacific Railway route to the Pacific Coast. These have excellent hotel accommodation, with opportunities for riding, climbing, swimming, boating and golf.

Agents will personally call on you to arrange your itinerary.

Particulars from any Canadian Pacific Ticket Agent, or write

M. G. MURPHY, District Passenger Agent, Toronto

Canada-South Africa Direct Service

Regular monthly sailings from Montreal in Summer and St. John, N.B. in Winter, calling at Cape Town, Algoa Bay (Port Elizabeth) East London, Port Natal (Durban) and Delagoa Bay in the order named.

Sailings 20th of each month.

All steamers fitted with refrigerators for the carriage of perishable freight.

For rates of freight and other information apply to

ELDER DEMPSTER & CO., Limited
318-319 BOARD OF TRADE BUILDING - - MONTREAL
Toronto Agent : S. J. SHARP, 19 Adelaide E.

THE

New Zealand Shipping Company, Limited

CANADA
TO

Australia and New Zealand

Regular monthly sailings from Montreal in summer and St. John in winter, calling at Adelaide, Melbourne and Sydney (Australia), and Auckland, Wellington, Lyttelton and Dunedin (New Zealand). Sailings 20th of each month.

Through bills of lading issued to all points in Australia, New Zealand, Tasmania and other islands of Oceania.

Marine Insurance effected at rates equal to those given from New York.

For rates and other information apply to

The New Zealand Shipping Co.
LIMITED

213 Board of Trade Building, Montreal

TRADE ENQUIRIES

The Weekly Bulletin of the Department of Trade and Commerce, from which some of these enquiries are taken, should be read regularly by those interested in foreign trade. It will be sent free on application to the Department at Ottawa.

206. **Carburettors.**—We have an inquiry for carburettors, used in traction engines using kerosene. In this case a double carburettor is required as gasoline is used to start on and later kerosene.
207. **Collapsible Tin and Lead Tubes.**—Inquiry is made for manufacturers of tubes suitable for containing liquids or paste.
208. **Bone Ash.**—A Canadian user of this material is desirous of obtaining supplies in Canada if possible.
209. **Machetes.**—These are understood to be heavier and shorter type of reaping hook. The inquiry is made by a New York firm of exporters interested in exporting them to West Africa.
210. **Automatic Screw Drivers.**—A Canadian firm is interested in finding out whether automatic ratchet screw drivers are made in Canada.
211. **Lamp Chimneys.**—A New York export house is desirous of getting in touch with Canadian manufacturers of these articles.
212. **Bolts and Nuts.**—A New York export house on behalf of one of their clients in New Zealand is desirous of getting in touch with Canadian manufacturers of bolts and nuts.
213. **Corrugated Asbestos.**—Inquiry is made by a firm in India for names of Canadian manufacturers of corrugated asbestos for roofing purposes.
214. **Agency.**—A South African commission agent of fourteen years' experience is prepared to take up Canadian agency in low and medium priced hosiery of all kinds, flannelette piece goods, cotton and wool dress goods, tent and sail duck, farm hardware, enamelware, lanterns, kitchen utensils of all kinds, clocks, medium price; combs, stationery and school requisites, and canned fish.
215. **Machine Wire, Iron Tubing, Copper, Brass and Bronze Waste, etc.**—A French importer desires to get in touch with persons able to supply the above, which has hitherto been obtained in Germany and Austria.
216. **Nails, Screws, Bolts and Nuts, Brushware, Step Ladders, Lanterns, Shovels and Gardening Tools, Etc.**—A firm in Johannesburg desires to receive catalogues and quotations f.o.b. Montreal from Canadian manufacturers, of nails, screws, bolts and nuts, brushware, step ladders, lanterns, shovels and gardening tools, patent roofing, pick handles, hammer handles, etc.



Cut of 50-inch "Extra" Double Belt

Made by The J. C. McLaren Belting Co., Limited.

WE ARE HEADQUARTERS FOR
ALL KINDS OFBELTING
LACE LEATHER
CARD CLOTHING
REEDS AND
GENERAL
MILL SUPPLIES

ABSOLUTE SATISFACTION GUARANTEED

The J. C. McLaren Belting Co., Limited

ESTABLISHED 1856

Head Office and Factory
MONTREAL, Que.

Branches:

50 COLBORNE ST., TORONTO
80 LOMBARD ST., WINNIPEG**LEATHER
BELTING***Made in Canada***J. L. Goodhue & Co., Limited**
DANVILLE, QUEBEC*Manufacturers of*
**SUPERIOR QUALITY LEATHER
BELTING AND LACE LEATHER****QUALITY***Not Price Our Aim***Canadian Manufacturers SHOULD
USE Canadian Belting**Winnipeg Agents:
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1141 Homer St.
Vancouver, B.C.*Made
in
Canada**From
British
Stock***"GENUINE OAK"
LEATHER BELTING****"D.K."
BALATA BELTING**

Guaranteed to Give Satisfaction

D. K. McLAREN LIMITEDTORONTO MONTREAL ST. JOHN, N.B.
247 Beatty Street, VANCOUVER
Engineer's Supply Co., 123 Bannatyne Ave. E., WINNIPEG

The Time to Start and the Time to Stick

THE present state of business conditions in Canada cannot but be remarkably encouraging to the man who sees ahead a little way.

The war has caused a tremendous upheaval of the economic conditions of the whole world, among other things creating a favorable balance of trade for Canada where before it was vastly unfavorable. It has awakened a patriotism and brought forth a movement that nothing else could have created—"Made in Canada."

The ultimate result must be that those countries which are farthest removed from the chaos and devastation of the war will, after the war is over, experience an era of prosperity such as they have never before known—Canada and the United States in particular.

Certain far-sighted manufacturers are building to-day on this certainty. By advertising now they are not only holding the business they have developed, but they are building a foundation of recognition and confidence on which to rear the enormous business structures that will grow up after the war.

The success of this agency throughout its 25 years of business life has been such that to-day it is handling a large percentage of all the general advertising appearing in Canadian publications. Its experience and its achievements are the best indications of its complete ability to plan and execute *successful* advertising.

Upon request we will be glad to study the advertising requirements of any business and submit our recommendations for either present or future advertising.

A. McKim Limited

Montreal, Toronto, Winnipeg, London, England

217. **Lumber, Doors, Door Frames, Window Frames, Etc.**—A Johannesburg firm desires to receive quotations f.o.b. Montreal, from Canadian manufacturers of lumber, doors, door frames, window frames, etc.
218. **Mild Steel Wire.**—A Yorkshire manufacturer desires the addresses of Canadian manufacturers who can supply mild steel wire for mattress making, weaving, book-binding, etc.
219. **Mica.**—A well-known foreign firm in Tokyo wishes to get in touch with producers and exporters of mica in Canada.
220. **Engineers' Taps and Dies.**—A Scottish firm is desirous of being placed in touch with first-class makers of engineers' taps and dies in Canada.
221. **Automobile Accessories.**—A Luton firm inquires for stampings in mild steel and alloy steel of motor car parts such as crank shafts, front axles, front axle spindles, gear wheels, levers, etc. Full particulars, prices delivered Liverpool and earliest date of delivery should be forwarded.
222. **Automobile Accessories.**—A firm in Nottingham wishes to hear from manufacturers of motor car parts, such as engines, back axles, gear boxes, wheels, etc., for pleasure cars and commercial vehicles.
223. **Motor Parts.**—A firm in Birmingham, one of the largest manufacturers of automobiles in Great Britain, would like to hear from any manufacturer in a position to machine pieces to their drawings and specifications.
224. **Ball Bearings.**—A firm manufacturing automobiles at Burton-on-Trent is open to purchase ball bearings.
225. **Maple Sugar and Syrup.**—A London firm desires the addresses of Canadian manufacturers and exporters of maple sugar and maple syrup.
226. **Wallpaper, Unprinted.**—A firm of wallpaper manufacturers wishes to be placed in touch with Canadian exporters of unprinted wallpaper.
227. **Antimony.**—A London firm who seek supplies of antimony asks to be placed in communication with Eastern Canadian producers.
228. **Latch Needles.**—A Leicester firm asks for names of Canadian manufacturers of latch needles for hosiery manufacturers.

PUBLICATIONS RECEIVED.

Pamphlet entitled "Wisdom Teeth," issued by the Berlin Machine Works, Beloit, Wisconsin, dealing with bank sawing machinery.

Pamphlet, "Dart Union Pipe Couplings," Dart Union Co., Limited, Toronto.

Pamphlet, "Norton Ball Bearing Jack," E. Norton, Limited, Coaticook, Que.

Report by Professor Price on properties of wood, split and iron pulleys, Dodge Mfg. Co., Toronto.



MACDONALD MANUFACTURING CO., LIMITED, TORONTO

We Specialize on Cans or Boxes required for Customer's Exclusive use
Practically Nothing Else made in our Entire Plant
This Ensures Undivided Attention to Your Particular Order

PLAIN OR DECORATED TIN BOXES AND SIGNS

McClary's

Specialists in

HOTEL AND INSTITUTION KITCHEN APPLIANCES

and Manufacturers of the "FAMOUS" line of Goods including

Coal and Wood
FURNACES

Coal, Gas and Wood
STEEL AND CAST RANGES

Coal, Gas, Wood and Oil
HEATERS

ENAMELWARE, TINWARE AND OTHER KITCHEN WARE

LONDON
MONTREAL
VANCOUVER

TORONTO
WINNIPEG

McClary's

ST. JOHN, N.B.
CALGARY
EDMONTON

HAMILTON
SASKATOON

DOON TWINES

LIMITED

DOON, ONT.

Manufacturers of Fine Mat-
tress, Tufting and Stitching
Twines from flax and hemp

We also supply flax and
hemp yarn for weaving

WRITE FOR PRICES

THE MONTREAL COTTONS LIMITED

MANUFACTURERS OF

WHITE VICTORIA
LAWNS

WHITE NAINSOOKS

and

DYED COTTONS

OF EVERY DESCRIPTION

CAN WE MAKE BIG GUNS?

The possibility of manufacturing big guns is being investigated by a special committee composed of representatives of Canadian manufacturing, banking and railway interests. As the result of a conference held in Ottawa on September 13, between these interests, Sir Robert Borden and Sir Sam Hughes, the British Government is prepared to order a great number of heavy guns if they can be made in Canada. Requirements of the War Office were laid before the conference by General Mahan, a British expert, who suggested that the different parts of the guns be manufactured in various plants, and that the assembling should be done at some central point.

The whole question was finally referred to the following committee for a report to the Government: Sir John Gibson, chairman; members of the Shell Committee, Messrs. Frederic Nicholls, Toronto; John Robb, Grand Trunk Railway; Hector McInnis, Halifax; F. L. Wanklyn, C. P. R.; Sir Lyman Jones, Sir William Mackenzie, Senator Edwards, Mr. Blackwell, of Montreal; James Young, of Dundas; George Burn, of Ottawa; J. Chaplin, of St. Catharines; Mr. Miller, of the Canadian Vickers Company, and Mr. F. P. Jones, of Montreal.

Those present at the conference were: Major-General Sir S. Hughes, president; Sir Robert Borden, Gen. Bertram, Sir John Gibson, J. F. Taylor and Arch. Stewart, Algoma Steel Co., Sault Ste. Marie; Col. Noel Marshall, John Carew, M.P.P., Lindsay; Col. Woods, Ottawa; Col. Wanklyn, C.P.R., Montreal; James Young, of the John Bertram Sons Co., of Montreal; P. L. Findley, Montreal; H. Bertram, Dundas; H. M. Osling, Balsam Iron Works, Toronto; M. C. Ellis, R. Gil-mour, Ottawa; W. R. Angus, Can. Star Foundry, Montreal; H. D. Pickett, Moose Jaw; G. H. Duggen, Dominion Bridge Co., Montreal; G. H. Chaplin, St. Catharines; Col. Meighen, Montreal; Mr. Riddell. Shell Committee, Col. C. W. Watts, Can. Gen. E. Co., Major R. W. Leonard, F. P. Jones, Sir W. Mackenzie, C.N.R.; Edward Gurney, Toronto; Sergt.-Major Hamilton, H. H. Vaughan, Montreal Ammunition Co., Limited, Montreal; E. Hay, general manager Imperial Bank of Canada, Toronto; B. B. Stevenson, Quebec Bank, Montreal; Sir Wm. Ince, Union Bank, Quebec; G. H. Balfour, general manager Union Bank of Canada, Winnipeg; C. P. Scholfield, general manager Standard Bank of Canada, Toronto; E. L. Pease, general manager Royal Bank of Canada, Montreal; Sir H. Holt, president Royal Bank of Canada, Montreal; Sir E. Walker, president Canadian Bank of Commerce; John Aird, general manager Canadian Bank of Commerce; H. A. Richardson, general manager Bank of Nova Scotia; R. W. Blackwell, vice-president Merchants' Bank of Canada, Montreal; Hector McInnis, K.C., Halifax; Sir Lyman Jones, Senator Edwards, W. Whestley, W. D. Robb, G.T.R., Montreal; T. J. Dillon, Welland; A. R. Goldie, Galt; J. P. McNaughton, Sydney; W. Inglis, Toronto; Rev. F. W. Squire, Ottawa; T. G. Brigham, Ottawa; D. Lemon, Montreal; J. A. Vaillencourt, Montreal; John P. Dunne, Prescott; Emery Wheel Co., Prescott; Sir Henry Pellatt, John Inglis, of John Inglis' Sons, Toronto; P. C. Brooks, Fairbanks-Morse Co., Toronto; C. G. Drinkwater, Fairbanks-Morse Co., Montreal; E. W. Gilman, Ingersoll Rand Co., Sherbrooke; E. S. Winslow, Mr. Aird, general manager Bank of Commerce; Col. Fred Nichols, Toronto; M. L. Davis, Standard Chemical Co., Toronto; Douglas C. Ridout, president Toronto Furniture Co., Toronto; Robert Hobson, Hamilton Steel and Iron Co., Hamilton; Geo. Burn, resident Bankers' Association, Bank of Ottawa; Mr. A. D. Braithwaite, Bank of Montreal; E. F. Hebden, Merchants' Bank, Montreal; H. B. Mackenzie, B.N.A., Montreal; Ed. Watts, A. F. Riddell, H. J. Myler, Hamilton; Warren Y. Soper, Ottawa Car Works.

A New LIGHT SIX —a True Russell

DRIVE this handsome Six and feel the continuous current of power that obeys your most exacting demand for varying speeds.

The harmony of operation of motor and driving parts, and the refinements of Russell construction, bring you to the pleasant realization that Motor Car Luxury need not longer be coupled with high cost.

But, until you examine minutely the wealth of high-grade features, the evidences of modern motor practice in every detail, you cannot appreciate the amazing value this New "Light Six" offers.

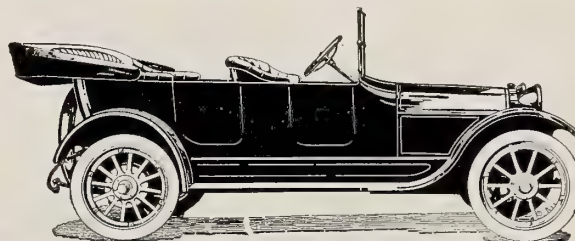
Glance along the clean simple lines of the car. Door handles and hinges hidden. Oval fenders, broad, low running-boards, built-in windshield, one-man top. Wide doors affording easy entrance and exit. Try the deep, restful cushions in the roomy tonneau.

Here, you must admit, is a true Russell, a big roomy class car, with the freedom and delicacy of operation you expect in a car bearing the "Russell" name.

The steering wheel is logically located at the left, the control at centre. The starting and lighting system is the two-unit Westinghouse electric. The rear tires are anti-skids, the bracket for the spare being at the rear.

Fuel feed is kept constant at any grade, by the Stewart Vacuum Tank. The Gasoline Tank is at the rear.

Dealers in Russell cars will be proud to give you more information about this interesting New "Light Six."



\$1475.00 (F.O.B. West Toronto)

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Branches: MONTREAL, TORONTO, HAMILTON, WINNIPEG, VANCOUVER

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No liquid dope or clay used in any of our brands—nothing but threads.

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AMONG THE INDUSTRIES

We direct the attention of our readers to this department, which has greatly enlarged and improved. Arrangements have been made to secure interesting news of manufacturing from all parts of Canada. We shall be glad to publish items of interest to manufacturers free of charge in this department provided they should not be properly classified as advertisements. If you have interesting items please send them in.

ALBERTA.

Edmonton, Alta.

Work has started on the sewage disposal plant. The cost is estimated at \$30,000.

BRITISH COLUMBIA.

Esquimalt, B.C.

By-laws will be submitted to the ratepayers to authorize the raising of \$30,000 by debentures to provide for the building of a fire hall and the purchase of fire apparatus.

Ioco, B.C.

A contract is about to be let for the erection of an office building and club house by the Imperial Oil Co., Limited. The estimated cost is \$18,000.

Vancouver, B.C.

The plant of the Imperial Casket Company has been destroyed by fire. New premises have been secured in which to carry on business.

W. F. Gardiner, Supervising Architect, is receiving tenders for marble tile, marble base and hardware for the bank building which is being erected at Pender and Main Streets.

MANITOBA.

Winnipeg, Man.

Work has been commenced on the new five storey plant of the Ford Motor Company here. The estimated cost is \$250,000. About 200 men will be employed in this plant which will open March 1st.

NEW BRUNSWICK.

St. John, N.B.

Business will be conducted on a large scale by the Martinon Lumber Company, which has recently been incorporated in the Province of New Brunswick, with Hon. I. K. Stetson, President of the First National Bank of Bangor, Me., as President; Frank C. Hinckley, Vice-President; Irvin G. Stetson, Treasurer, and Waldo F. Lowell, General Manager.

NOVA SCOTIA.

Liverpool, N.S.

The Town Council contemplate making improvements to the municipal electric light plant.

Truro, N.S.

The plant and property of the Truro Engineering Works, Limited, has been purchased by the Truro Steel Co., Limited, for the manufacture of shells.



**It Costs More to Wear Out
An Inefficient File**

At a certain point in the life of any file, its BEST efficiency is lost. Beyond that point it ceases to be an economical tool. It then costs more—in lost time and labor—to wear it out completely, than to replace with a new efficient file.

This has been *proven*—beyond shadow of doubt—in hundreds of shops—on every kind of work. So that to insure maximum efficiency in your filing—it is only necessary to learn—by actual tests in your shop—the “lost efficiency” point on your work. And then insist that your workmen replace all files at this point with the “Famous Five”:

**KEARNEY & FOOT, GREAT WESTERN
AMERICAN, ARCADE, GLOBE**
(Made in Canada)

The saving in TIME—the increase in OUTPUT—the UNIFORM quality of work—repay many times over the slight extra cost of additional files.

The “Famous Five”—used RIGHT—GUARANTEE high efficiency at low cost. For they are the net results of 50 years’ QUALITY-File experience. Five great plants, filled with

modern automatic machinery, insure unvarying accuracy. A 60,000,000 production yearly insures low first cost. Our complete control of every process from furnace to file, insures the continuous reliability that makes them famous. And their record of 90% of Canada’s file-trade is ample assurance that they always “make good.”

“File Philosophy” and our Catalog sent FREE on request.

Nicholson File Co.

(Dealers Everywhere)

Port Hope

MALLEABLE IRON CASTINGS

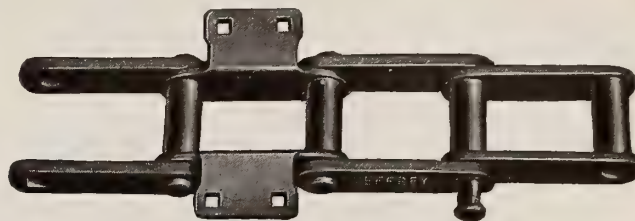
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They stand the Wear and Tear of Grit and Grind. "Substitutes" for Malleable Chains. Work over many sizes of Standard Sprocket Wheels.

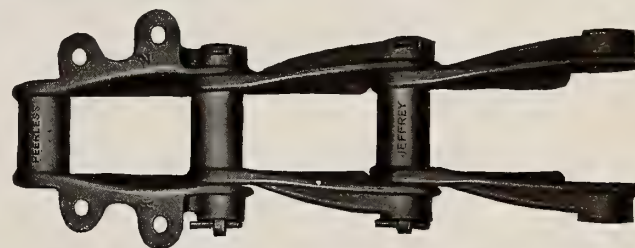
Their use means less expense, longer life, fewer renewals and lower operating costs.

Write for Bulletin No. 152-3, illustrating types of Jeffrey Manganese Chains now in stock.

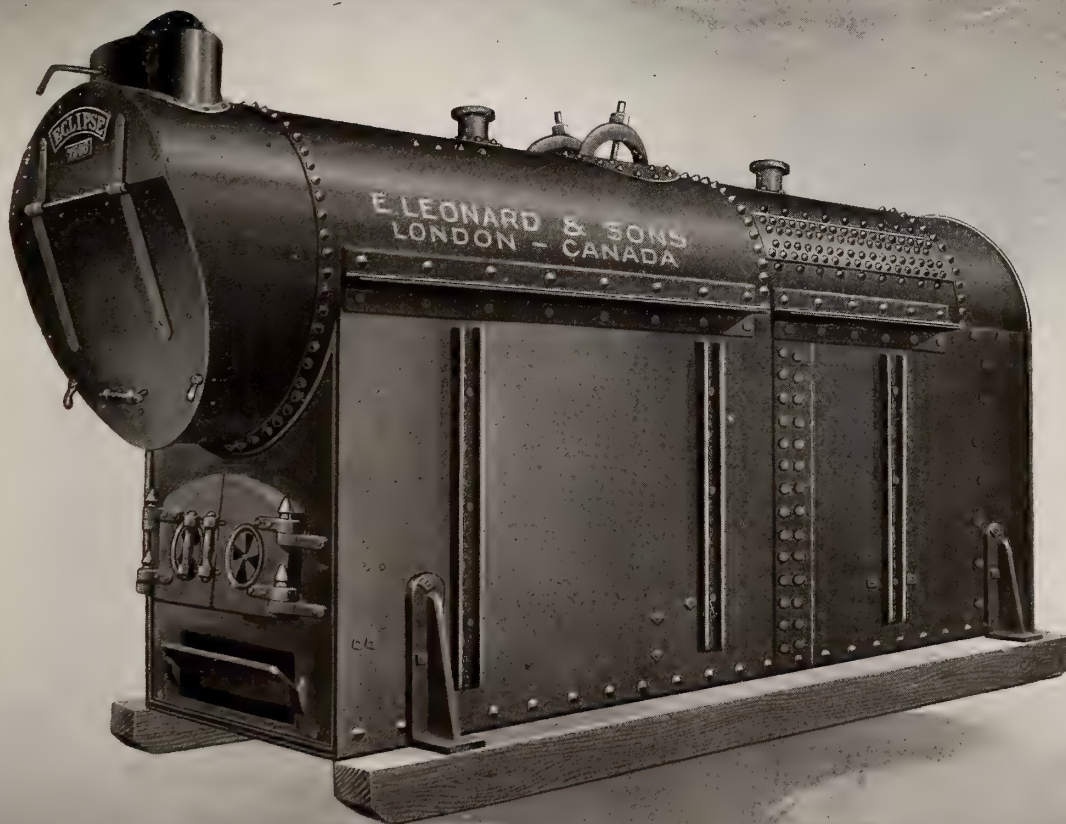
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MONTREAL LOCOMOTIVE WORKS, LTD.,

DOMINION EXPRESS BUILDING, MONTREAL, CANADA

ONTARIO.

Brantford, Ont.

An addition will be built to the factory of the Brantford Cordage Company.

Brighton, Ont.

Construction has commenced on the building for the D. J. Barker Foundry Company.

Cache Bay, Ont.

Work will commence at once on the rebuilding of the saw-mill for George Gordon & Co., Limited. Estimated cost is \$75,000.

Chatham, Ont.

The Canadian Wolverine Company has decided to discontinue manufacturing certain staple lines of brass goods. The City Council which is interested to the extent of about \$15,000 has granted the company permission to dispose of the machinery. Some of the machinery can be used for the purpose of manufacturing war munitions. This company has suffered twice from heavy fire loss within the past two years, but on each occasion has rebuilt. It will continue to use the present plant for assembling and distributing purposes.

The Ideal Electrical Mfg. Company, of Wallaceburg, is going to move here shortly. This is among the oldest establishments in Canada making electrical heating goods.

Ford, Ont.

The Ford Company contemplates building a plant for making farm tractors.

Mount Bridges, Ont.

The Crow Motor Company are considering the erection of an automobile factory to cost \$10,000.

Ottawa, Ont.

Work has been started on the erection of an addition to a warehouse for the Bate Realty Company. It is probable that contracts for heating, plumbing and electrical work will be let later.

It has been urged by a delegation of members of Parliament that the shops of the Sorel shipyard be turned into a factory for shells as well as using a private owned factory there for that purpose.

The General Supply Co., of Canada, have opened an office at 408 McGill Building, Montreal, in charge of G. W. Robb. They handle railway supplies, concrete machinery, pumps, etc.

Toronto, Ont.

At the annual meeting of the Canadian Press, Limited, held in Toronto, Mr. John S. Lewis, of the Montreal Star, who has been the efficient Secretary-Treasurer for several years, retired, owing to the fact that he is going to the front. The officers for the ensuing year are: E. F. Slack, Gazette, Montreal, President; E. H. Macklin, Free Press, Winnipeg, First Vice-President; W. J. Blackburn, Free Press, London, Second Vice-President; C. F. Crandall, Star, Montreal, Secretary-Treasurer.



Walls, white or covered with foliage paper, with blue or grey predominating; woodwork white; rugs, plain dark blue centre with floral border; hangings dark blue; pictures, eighteenth century, sporting prints or reproductions of Gainsborough, Reynolds or Romney.

A Chippendale Dining Room Suite

By the Toronto Furniture Co., Limited

"MANY A THING DIVINELY DONE BY CHIPPENDALE AND SHERATON."—Andrew Lang.

OF ALL furniture, that made by Chippendale is surely the most beautiful and practical. Beautiful because of its delicate carving, graceful curves, perfect proportions and soft, deep-toned coloring; practical because in everything pertaining to design, Chippendale subordinated all other elements to that of structural stability. ¶ In our replicas of Chippendale furniture, we have reproduced with fine sympathetic feeling and admirable skill the beautiful decorations, simple chaste lines, perfect proportions, and clear luminous finish that make the originals so delightful. ¶ The very simplicity which you admire in this Chippendale suite enables us to produce it at a price at least no higher than that demanded for ordinary furniture, lacking its distinction of style and finish. We invite you to view this and other notable periods in our line at the leading dealers in your locality.

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STRUCTURAL - DETAILS

Sideboard—25 in. x 66 in. Has five drawers and three velvet-lined trays for table silver. May be had with or without mirror back. All drawers have dust-proof bottoms. *Table*—54 in., 8 or 10 ft. extension. *China Cabinet*—May be had with or without drawers. *Serving Table*—22 in. x 43 in. *Chairs*—Upholstered in leather or tapestry. *Wood*—Mexican mahogany, finished in antique, rubbed to a dull egg-shell gloss.



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Can supply every Canadian Manufacturer and Jobber with their entire requirements of Steel and Brass Compression GREASE CUPS, Plain, Ratchet or Leather Washer Types, any finish desired. Also all styles of Oil Hole Covers.

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Hinge Lid Pressed Brass Oil Cup

With Syphon Feed, if desired. No order too large to ship from stock. Anything special you have been importing we will gladly make to your order. If your Jobber can't supply you with WINKLEY Cups write us for prices and Catalogue.

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ELEVATED STEEL TANKS AND STANDPIPES

For Municipal, Railroad
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We also build Oil Tanks, Coaling Stations, Bridges, Turntables, Buildings and Structural Material. Write for illustrated Catalogue No. 25.

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NOTICE

To Manufacturers, Dealers
and Users of Steam Boilers.

All steam boilers built in, or entering the Province of Ontario, and boilers exchanged or repaired, are subject to Government Inspection as prescribed in the Steam Boilers Act, 3 George V., C. 61.

Before any work of repair or alteration is commenced on any boiler, notice must be sent to the Department stating the nature and extent of the repairs or alterations proposed to be made. If the Chief Inspector should consider such repairs or alterations of an extensive character, the boiler must be inspected in accordance with the Regulations by an Inspector authorized under the Act.

All communications should be addressed to the Steam Boiler Branch, Department of Public Works, Parliament Bldgs., Toronto.

HON. FINLEY G. MACDIARMID, **D. M. MEDCALF,**
Minister of Public Works. Chief Inspector of Steam Boilers.

Welland, Ont.

Preparations are being made to re-open the local plant of the Canadian Steel Foundries, Limited. Operations will first begin in the foundry on shell billets and the rolling mill may open later.

QUEBEC.

Lachine, Que.

The tender of the Atlas Construction Company, Montreal, for an incinerator destroying twenty tons every twenty-four hours has been accepted by the City of Lachine.

Montreal, Que.

At an estimated cost of \$20,000 the Mount Royal Color & Varnish Company will build an extension to their factory.

An extension is being built to the factory owned by Robin Bros.

Construction work is being rushed on the new million dollar addition to the Harbor Commissioners' elevator No. 1.

SASKATCHEWAN.

Redvers, Sask.

Tanks will be erected this fall on the track site obtained by the Imperial Oil Company.

CARBIDE OF CALCIUM FOR RUSSIA.

An article entitled "Trade Opportunities of Russia," written by C. F. Just, Special Canadian Commissioner to Russia, which was republished from the Weekly Report of the Trade and Commerce Department in the September issue of INDUSTRIAL CANADA, contained the following statement:

"In regard to Carbide of Calcium, it is at present rather difficult to say whether the arrangements of the combine of producers of this article would permit its exportation to Russia from Canada. There is, however, a large demand for it."

In connection with the above, Mr. Howard Murray, of the Canada Carbide Company, Limited writes:

"I wish to state that Canada Carbide Company, Limited, is in no combine and is hampered in no way whatever in its trade relations with any country. The capacity of our plant at Shawinigan Falls and Merritton is being largely increased and the Russian market as well as any markets not already entered by this country will be developed."

REPRESENTATIVE FOR KNIT GOODS.

Experienced knit goods man, capable of handling sales and manufacturing end of business, open for position. Excellent references. Moderate salary. Could make moderate investment. Apply to Box 20, INDUSTRIAL CANADA.

NEW U.S. SAILINGS FOR AUSTRALIA.

An arrangement has been concluded between the Post-office Department and the Oceanic Steamship Company for an additional 16-knot American mail steamer between San Francisco and Sydney, Australia, via Pago Pago, Samoa and Honolulu. This will result in a sailing from San Francisco every three weeks.



By Royal Warrant

“Canadian Club” Whisky

Fully Ripened in Wood. Age Guaranteed by Government.

QUALITY UNEXCELLED

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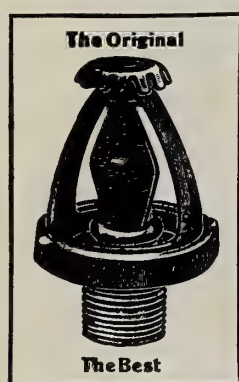
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INTERESTING TABLE OF IMPORTS FROM NEW ZEALAND OFFICIAL YEAR BOOK, 1914.

New Zealand Imports, 1913.

	Canada.	U.S.A.	Ger- many.
Tools and implements.....	£2,349	£87,091	£4,555
Cattle.....	2,700	3,800
Boots and shoes	9,285	20,428
Apparel and slops	11,289	42,172	5,650
Motor vehicles and materials....	116,608	227,923	82,515
Fish	34,173	4,382
Furniture, etc.	9,509	8,660	2,628
Glass	4,883	13,456	32,691
Hardwood, hollow-ware and iron- mongery	4,188	63,919	28,923
Iron and steel pipes and fittings.	4,595	23,949
Fencing wire	3,035	52,241	5,822
Agricultural machinery	44,554	60,306	5,183
Sewing machines	2,032	24,831	5,234
Timber, lathes and shingles....	5,307	2,128	2,045
Paperhangings, etc.	8,021	16,295	31,163
Seeds, grass, etc.	3,598	7,403
Woodenware	3,386	17,484	2,042
Pianos and musical instruments..	5,852	57,068
Fancy goods and toys.....	11,652	52,404

Other articles at present imported from the United States, to the exclusion of Canadian goods, and despite the preferential Customs tariff, are: Arms and explosives, £13,231; belting, £3,090; bicycles and motor cycles, £4,454; books and papers, music, etc., £9,969; brushware and brooms, £5,087; perambulators and go-carts, £4,461; fencing wire, £52,241; electrical machinery, £71,364; paints and colors, £13,844; tobacco, cigars and cigarettes, £85,169; clocks, £16,153; confectionery, £5,845; patent foods, £5,950; grindery, £10,198; iron pipes and rails, sheet iron and wire, £15,520; fencing staples, £6,808; oil engines, £23,725; kerosene and other oils, £371,839; timber, £90,673.

Dominion Finance Quarter's Bankings, 31st March, 1915.

	March, 1914.	March, 1915
Deposits	£24,030,250	£26,829,245
Advances	21,649,643	22,006,141
Excess of deposits.....	£2,380,607	£4,823,104

External Trade, New Zealand Leads.

Country.	Population.	Imports per head.	Exports per head.
		£ s. d.	£ s. d.
New Zealand	1,095,996	19 17 6	25 1 5
Australia	4,872,059	16 12 0	16 7 2
Canada	7,758,000	16 15 10	12 7 2

C. P. R. FREIGHT OFFICE CHANGES.

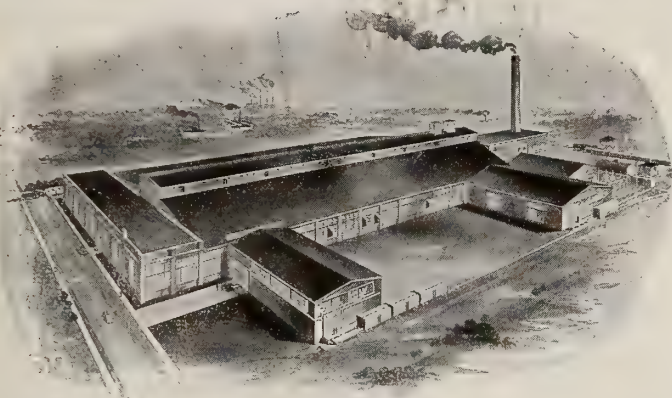
Mr. W. M. Kirkpatrick having been appointed an officer in the Eighty-seventh Overseas Battalion, Canadian Grenadier Guards, the following appointments will be in effect until he returns to the Company's service:

Mr. H. E. Macdonell will perform the present duties of the Assistant Freight Traffic Manager, Montreal, Que.

Mr. E. N. Todd will perform the present duties of the General Freight Agent, Montreal, Que.

Mr. A. O. Secord will perform the present duties of the Division Freight Agent, Montreal, Que.

Mr. J. J. Kelly will perform the present duties of the District Freight Agent, Ottawa, Ont.



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Cold Drawn, Cold Rolled
Turned and Polished Steel
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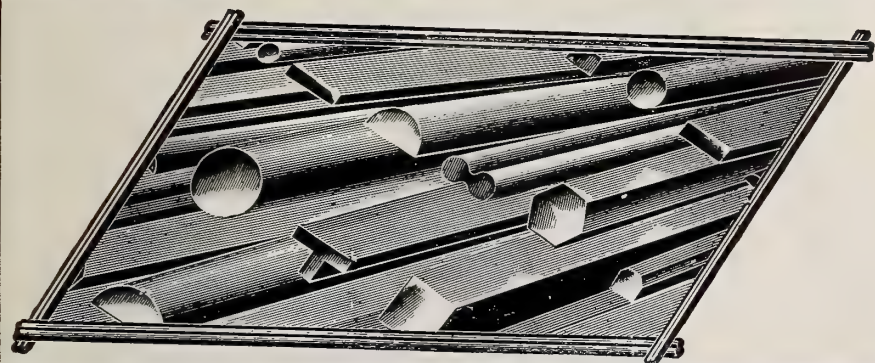
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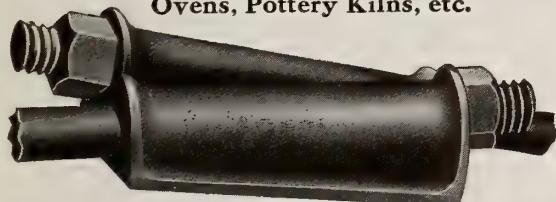
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On Silos, Tanks, Water Pipes, Penstocks
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For round Rods $\frac{3}{8}$ to $1\frac{1}{2}$ inch

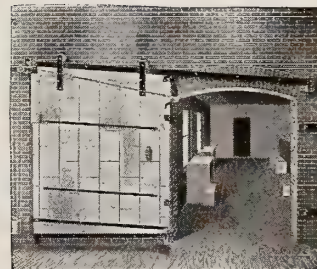
Flat Bands 2 to 6 inches wide

Best Malleable Iron—Prompt Shipments.

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Fire Door Hardware—All Styles
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CARRIER SYSTEMS I-Beam or Trolley

Save Money on Your
Factory Transportation



BULLDOG STEEL
JOIST HANGERS
They never let go!
Stronger than
malleable

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Trolleys
are best for
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Closet Seats,
Flush Tanks,
Medicine Cabinets,
Everything for the Bath Room.

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\$20⁰⁰ instead of \$100⁰⁰
will pay
Your Insurance Premium



The balance will install a complete system of Manufacturers' Automatic Sprinklers.

Let us prove the truth of above statement.

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**Esty
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H. G. VOGEL CO. CANADA LIMITED
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OCTOBER STEAMSHIP SAILINGS.

The following is a list of ocean sailings from Canadian ports during October:

Australia.

To Sydney—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, October 27; from Victoria, *Makura*, October 27.

China.

To Hong Kong—Blue Funnel Line: From Victoria, *Titan*, October 5 (Pacific route).

To Shanghai and Hong Kong—Canadian Pacific Railway Company's Steamship Line: From Vancouver, *Monteagle*, October 11.

Fiji.

To Suva—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, October 27; from Victoria, *Makura*, October 27.

Hawaii.

To Honolulu—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, October 27; from Victoria, *Makura*, October 27.

Japan.

To Yokohama, Kobe and Moji—Canadian Pacific Railway Company's Steamship Line: From Vancouver, *Monteagle*, October 11.

To Yokohama, Kobe—Blue Funnel Line: From Victoria, *Titan*, October 5 (Pacific route).

New Zealand.

To Auckland—Canadian-Australasian Royal Mail Line: From Vancouver, *Makura*, October 27; from Victoria, *Makura*, October 27.

Philippine Islands.

To Manila—Blue Funnel Line: From Victoria, *Titan*, October 5 (Pacific route).

MOUTH ORGANS WANTED.

If there is a Canadian manufacturer of "mouth organs" he can do a little business with the Sportsmen's Patriotic Association. The association has had requests for everything from sporting paraphernalia to pianos and billiard tables, and has succeeded in filling the "orders" in most instances. Now, however, it is "up against it."

The latest request from the boys at the front in France is for two thousand harmonicons. As these are almost exclusively of German manufacture, the committee is in a quandary. There is no good substitute.—*Toronto Globe*.

NEW COMPANIES.

The France & Canada Steamship Company, Limited, with headquarters at Montreal, and with a capitalization of \$1,000,000, has been incorporated by Dominion letters patent. The company will build, purchase, charter, etc., vessels of various kinds, and will carry on the business of shippers, freighters and general ocean carriers.

The Specialty Paper Bag Company, with headquarters at Ottawa, and with a capitalization of \$100,000, has also been incorporated.



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It's quickly handled—it's fire-proof—it's just a little short of being everlasting. The "M.R. Co." line is superior on every count. It comprises

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- "Metallic" Siding and Ceiling Plates
- "Empire" Corrugated Iron; Skylights;
- "Metallic" Lath; Cornices; Ventilators
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TORONTO

MONTREAL

BUYERS' GUIDE TO CANADIAN MANUFACTURES

A List of Articles Which Will Enable the Purchaser to Know the Manufacturers of Made-in-Canada Goods. For Rates for Insertion in this Department Write to the Advertising Manager of Industrial Canada, Toronto.

ABRASIVE MATERIALS

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.
- *Dominion Abrasive Wheel Co., New Toronto, Ont.

ACCOUNT BOOKS

- *The Brown Bros., Ltd., Toronto.

ACCOUNTING FORMS

- Business Systems, Ltd., Toronto.

ACETYLENE GAS BURNERS

- Economic Acetylene Burner Co., Toronto.

ACIDS

- *The Grasselli Chemical Co., Ltd., Toronto.
- *The Nichols Chemical Co., Ltd., Montreal.

ADVERTISING NOVELTIES

- Lawson & Jones, Ltd., London, Ont.

AERATED BEVERAGES

- Charles Gurd & Co., Ltd., Montreal, Que.
- J. J. McLaughlin, Ltd., Toronto.

AIR WASHERS

- *The Canadian Sirocco Co., Windsor, Ont.

ALCOHOL

- The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- *Hiram Walker & Sons, Ltd., Walkerville, Ont.

ALE

- E. L. Drewry, Winnipeg, Man.

ALUMINUM

- *Northern Aluminum Co., Ltd., 1805 Traders Bank, Toronto.

ALUMINUM CASTINGS

- *Tallman Brass & Metal Co., Hamilton, Ont.

AMMONIA

- Canadian Ammonia Co., Ltd., Toronto.

ANGLE BARS

- *The Steel Co. of Canada, Ltd., Hamilton.

ARCHITECTS

- *T. Pringle & Sons, Montreal.

ASBESTOS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEATHING:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS SHEET AND PISTON PACKINGS:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS STEAM PIPE AND BOILER COVERINGS:

- *Eureka Mineral Wool & Asbestos Co., Toronto.

ASBESTOS TEXTILES:

- *Canadian H. W. Johns-Manville Co., Toronto.
- *Eureka Mineral Wool & Asbestos Co., Toronto.

ATHLETIC UNDERWEAR

- Williams, Green & Rome Co., Ltd., Berlin, Ont.

AUTOMOBILES

- *Ford Motor Co., of Canada, Ltd., Walkerville, Ont.
- *Russell Motor Car Co., Ltd., Toronto.

AUTOMOBILE ACCESSORIES,

- *Northern Electric Co., Limited, Montreal.
- *Tallman Brass & Metal Co., Hamilton.

AUTOMOBILE PARTS

- *Dominion Stamping Co., Walkerville, Ont.

AWNING CORD, cotton

- Hamilton Cotton Co., Hamilton, Ont.

AWNINGS

- *Smart-Woods, Ltd., Montreal.

AXLES

- Canada Forge Co., Ltd., Welland, Ont.
- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

AXLES, carriage and automobile

- Guelph Spring & Axle Co., Ltd., Guelph, Ont.

BABBITT METAL

- Alonso W. Spooner, Limited, Port Hope, Ont.
- *The Canada Metal Co., Toronto.
- *Tallman Brass & Metal Co., Hamilton.

BACON

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BAGS

- *Scythes & Co., Ltd., Toronto.
- *Smart-Woods, Ltd., Montreal.

BAGS, Cotton

- The Canadian Bag Co., Ltd., Montreal, Que.

BAGS, jute

- The Canadian Bag Co., Ltd., Montreal, Que.

- *Scythes & Co., Ltd., Toronto.

BAGS, travelling

- J. Eveleigh & Co., Ltd., Montreal, Que.

- Lamontagne, Ltd., Montreal, Que.

- The M. Langmuir Mfg. Co., of Toronto, Ltd., Toronto.

BAKING JAPAN

- *Berry Bros., Ltd., Winnipeg, Man.

BAND RESAWS:

- *Berlin Machine Works, Ltd., Hamilton.

BANK AND OFFICE RAILINGS

- *The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Co., Ltd., Toronto.
- *Canada Wire and Iron Works, Hamilton.

BANK FITTINGS

- The Canadian Office & School Furniture Co., Ltd., Preston, Ont.

BANK RAILINGS and CAGES:

- *Canada Wire and Iron Goods Co., Hamilton.
- *Dennis Wire & Iron Works Co., London.

BANK SIGNS AND FITTINGS

- *Tallman Brass & Metal Co., Hamilton.

BARB, iron

- London Rolling Mill Co., Ltd., London, Ont.

BARB, steel

- London Rolling Mill Co., Ltd., London, Ont.

BASEBALL GOODS

- A. J. Reach Co., Brantford, Ont.

BATHS, enamelled

- Amherst Foundry Co., Ltd., Amherst, N.S.

BATTERIES, dry

- The Canadian National Carbon Co., Ltd., Toronto.
- Canadian Carbon Company, Ltd., Toronto.

BEARINGS:

- *The Chapman Double Ball Bearing Co., Ltd., Toronto.
- The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS, bronze

- *Tallman Brass & Metal Co., Hamilton, Ont.

BEARINGS, pillow block and up-right.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEARINGS.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

BEDS, camp folding

- *Otterville Mfg. Co., Ltd., Otterville, Ont.
- *Smart-Woods, Ltd., Montreal.

BEEF

- E. W. Fearman Co., Ltd., Hamilton, Ont.

BEEH

- E. L. Drewry, Winnipeg, Man.

BELTING, chains.

- *Dodge Mfg. Co., Ltd., Toronto.
- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *Jeffrey Mfg. Co., Montreal, Que.

BELTING, Elevator

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

BELTING, leather

- The Beardmore Belting Co., Ltd., Toronto.

- *J. L. Goodhue & Co., Danville, P.Q.

- *Sadler & Howarth, Montreal.

- *The D. K. McLaren Belting Co., Ltd., Montreal.

- *The J. C. McLaren Belting Co., Ltd., Montreal.

BELTING, rubber

- *Canadian Consolidated Rubber Co., Ltd., Montreal, Que.

- *Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

- *Gutta Percha & Rubber, Limited.

BENT GOODS

- The Crown Lumber Co., Woodstock, Ont.

BICYCLES and ACCESSORIES

- *Canada Cycle and Motor Co., Ltd., Toronto.

BILLIARD BALLS

- Samuel May & Co., Toronto.

BINDERS, loose leaf

- Business Systems, Ltd., Toronto.

BISCUITS

- The Montreal Biscuit Co., Montreal, Que.

BLACK SHEETS:

- *A. C. Leslie & Co., Montreal.

BLANK BOOKS:

- Business Systems, Ltd., Toronto.
- *Morton, Phillips & Co., Montreal.

BLANKETS

- Slingsby Mfg. Co., Ltd., Brantford, Ont.
- J. Walsham & Son, Limited, Bolton, Ontario.

BLANKETS, horse

- Slingsby Mfg. Co., Ltd., Brantford, Ont.

- *Smart-Woods, Ltd., Montreal

- J. Walsham & Son Limited, Bolton, Ont.

BLASTING ACCESSORIES

- Canadian Explosives, Ltd., Montreal, Que.

BLEACHING POWDER

- Canadian Salt Co., Ltd., Windsor, Ont.

BLOWERS:

- *The Canadian Sirocco Co., Windsor, Ont.
- *Sheldons, Ltd., Galt.

BOATS OF ALL KINDS

- Peterboro Canoe Co., Ltd., Peterboro, Ont.

BOILER COMPOUND and OILS

- *Canadian H. W. Johns-Manville Co., Toronto.

- Electric Boiler Compound Co., Ltd., Guelph, Ont.

BOILERS.

- *M. Beatty & Sons, Ltd., Welland, Ont.

- *Goldie & McCulloch Co., Ltd., Galt, Ont.

- John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

- *Polson Iron Works, Ltd., Toronto

- J. & R. Weir, Montreal, Que.

- Taylor-Forbes Co., Ltd., Guelph, Ont.

- *Jenckes Machine Co., Sherbrooke

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS, heating:

- *The Goldie & McCulloch Co., Ltd., Galt.

- *The Watrous Engine Works Co., Ltd., Brantford.

- Warden King, Ltd., Montreal, Que.

BOILERS, steam.

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.

- Steel and Radiation Ltd., Toronto

- Warden King, Ltd., Montreal, Que.

- *The Watrous Engine Works Co., Ltd., Brantford.

BOILERS AND TANKS

- *The Goldie & McCulloch Co., Ltd., Galt, Ont.
- *The Watrous Engine Works Co., Ltd., Brantford.

BOILER FEED PUMPS.

- *The Bawden Machine Co., Limited, Toronto.

BOILER STANDS

- Antnes Foundry Ltd., Toronto.

BOLSTERS

- *Canadian Car & Foundry Co., Ltd., Montreal, Que.

BOLTS:

- *The National Acme Mfg Co., Montreal.

BOLTS AND NUTS:

- *The Canadian Tube & Iron Co., Ltd., Montreal, Que.
- *The Steel Co. of Canada, Ltd., Hamilton.

- Starr Mfg. Co., Ltd., Dartmouth, N.S.

BOOKBINDERS

- R. G. McLean, Toronto.
- *The Brown Bros., Ltd., Toronto.

BOOKCASES, sectional (Gunn)

- The George McLagan Furniture Co., Ltd., Stratford, Ont.

BOOKLETS

- Stone Limited, Toronto.
- R. G. McLean, Toronto.

BOOKS, blank

- *The Brown Bros., Ltd., Toronto.

BOOTS AND SHOES.

- Ames-Holden-McCreedy, Ltd., Montreal, Que.

- J. Leckie Co., Ltd.

- The John Ritchie Co., Ltd., Quebec, Que.

BOWLING ALLEYS

- Samuel May & Co., Toronto.

BOXES, cellular board:

- *The Thompson & Norris Co. of Canada, Ltd., Niagara Falls.

BOXES, rattle and soap

- The Arlington Co. of Canada, Ltd., Toronto.

BOXES AND SHOOKS, wooden

- The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

BOXES, wooden

- G. & J. Esplen, Montreal, Que.

- Barchard & Co., Ltd., Toronto.

BRAIDS and TRIMMINGS

- The Moulton Mfg. Co., Ltd., Montreal.

BRAKE SHOES

- *Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRANDS, burning

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS BOLTS AND NUTS

- *Tallman Brass & Metal Co., Hamilton.

BRASS, BRONZE and ALUMINUM LETTERS

- *Tallman Brass & Metal Co., Hamilton.

BRASS ENGRAVERS

- Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS FOUNDERS and FINISHERS.

- *The Booth-Coulter Copper & Brass Co., Ltd., Toronto.

- *Tallman Brass & Metal Co., Hamilton.

BRASS GOODS

- *Booth-Coulter Copper & Brass Co., Ltd., Toronto.

- The Garth Co., Montreal, Que.

- The James

BRASS PLATES

Geo. Booth & Son, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS RODS, Sheets and Tubing:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

BRASS SIGNS AND MEMORIALS

Patterson & Howard, Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WIRE

Canadian Seamless Wire Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

BRASS WORK, church.

Pritchard, Andrews Co. of Ottawa, Ltd., Ottawa, Ont.

BRASS WORK, special

Bawden Machine Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*The Waterson Engine Works Co., Ltd., Brantford.

BRICK

National Brick Co. of Laprairie, Laprairie, P.Q.
Port Credit Brick Co., Port Credit, Ont.

BRICK, enamel

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, pressed

National Brick Co. of Laprairie, Laprairie, P.Q.

BRICK, rubbing

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

BRICK, sewer

National Brick Co. of Laprairie, Laprairie, P.Q.

BRIDGES, Railway and Highway

Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.

BRINE PUMPS.

*The Bawden Machine Co., Limited, Toronto.

BRONZE, brass and gold letters

Geo. Booth & Son, Toronto.

BROOMS

Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.
*Boeckh Bros Co., Toronto.

BRUSHES:

*Boeckh Bros. Co., Toronto.
Simms, T. S., & Co., Ltd., St. John, N.B.
Stevens-Hepner Co., Ltd., Port Elgin, Ont.

BRUSHES, carbon

Canadian National Carbon Co., Ltd., Toronto.

BUCKET TANKS

*The General Fire Equipment Co., Ltd., Toronto, Ont.

BUCKLES, shoe and coat

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

BUILDING

Bathurst Lumber Co., Ltd., Bathurst, N.B.

BUILDING BLOCKS, vitrified, salt glazed

Standard Clay Products, Ltd., St. Johns, Que.

BUILDING FELT and PAPER:

*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
*Paterson Manufacturing Company, Toronto and Montreal.

BUILDING PAPERS

*Bird & Son, Hamilton, Ont.

BUILDERS, ship

*Polson Iron Works, Ltd., Toronto.
J. & R. Weir, Montreal, Que.

BURLAPS

The Canadian Bag Co., Ltd., Montreal, Que.
*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

BURLAPS, decorative

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CABLE, Copper and galvanized:

*The Steel Co. of Canada, Ltd., Hamilton.

CABLES, transmission and tele-

phones:
*Eugene F. Phillips Electrical Works, Ltd., Montreal.

CABLES, Transmission and Cable:

*Northern Electric Co., Limited, Montreal.

CABLES, wire

The Dominion Wire Rope Co., Ltd., Montreal.
*The B. Greening Wire Co., Ltd., Hamilton.

CALENDARS, ADVERTISING NOV-

ELTIES, etc.
Rolph & Clark, Ltd., Toronto.
Lawson & Jones, Ltd., London, Ont.
Stone Limited, Toronto.

CAMERAS

Canadian Kodak Co., Ltd., Toronto.

CAMPERS' OUTFITTERS

Slingsby Mfg. Co., Ltd., Brantford, Ont.

CANOEES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

CANS, baking powder, etc.

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, fruit

American Can Co., Montreal and Hamilton.
A. R. Whittall, Montreal.

CANS, tin

A. R. Whittall, Montreal, Que.
American Can Co., Montreal and Hamilton.

CANS, iron, lead and putty

A. R. Whittall, Montreal.

CANVAS

*Scythes & Co., Ltd., Toronto.
*Smart-Woods, Ltd., Montreal.

CAPS, cloth

John W. Peck & Co., Ltd., Montreal, Que.

CARBIDE

*Canada Carbide Co., Ltd., Montreal.

CARBON BRUSHES

Canadian Carbon Co., Ltd., Toronto.

CARBON PRODUCTS

Canadian Carbon Co., Ltd., Toronto.

CARBONATING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

CARBONS, arc light

Canadian Carbon Co., Ltd., Toronto.
The Canadian National Carbon Co., Ltd.

CARBONS, flame

Canadian Carbon Co., Ltd., Toronto.

CARBONIC ACID GAS

Canadian Carbonate Company, Limited, Montreal.

CARBIDE OF CALCIUM

Canada Carbide Co., Ltd., Montreal, Que.

CARDBOARD

Bathurst Lumber Co., Ltd., Bathurst, N.B.

CARPETS AND RUGS

Toronto Carpet Mfg Co., Ltd. Toronto.

CARPETS AND RUGS, Axminster and ingrain

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPETS AND RUGS, Brussels and Wilton

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARPET YARNS, worsted and wool

Toronto Carpet Mfg. Co., Ltd., Toronto.

CARRIAGES, baby, etc.

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

CARRIERS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

CARRIERS, box and barrel

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

CARRIERS, brick

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*Jeffrey Mfg. Co., Montreal, Que.
*Richards-Wilcox Canadian Co., Ltd., London, Ont.

CARS

*Canadian Car & Foundry Co., Ltd., Montreal, Que.

CARS, industrial:

*Sheldons, Ltd., Galt.

CARTONS, lithographed

Harris Lithographing Co., Toronto.

CASTINGS:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, aluminum:

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass:

*Tallman Brass & Metal Co., Hamilton.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

CASTINGS, brass and bronze:

*Tallman Brass & Metal Co., Hamilton.

CASTINGS, grey iron.

*Dodge Mfg. Co., Toronto.
*Canadian Car & Foundry Co., Ltd., Montreal, Que.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Record Foundry and Machine Co., Moncton, N.B.

Wm. Kennedy & Sons, Ltd., Ower Sound, Ont.

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

CASTINGS, malleable iron:

*Galt Malleable Iron Co., Ltd., Galt, Ont.
*Pratt & Letchworth Co., Brantford, Ont.

CASTINGS, steel:

*Canadian Steel Foundries, Ltd., Montreal.
*Dominion Steel Foundry Co., Ltd., Hamilton, Ont.
Wm. Kennedy & Sons, Ltd., Ower Sound, Ont.

CATALOGUE MAKERS

Grip, Ltd., Toronto.
R. G. McLean, Toronto.

CAUSTIC SODA

Canadian Salt Co., Ltd., Windsor, Ont.

CEMENT GUNS

Steel and Radiation, Ltd., Toronto.

CHAIRS, assembly hall

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, folding

Stratford Mfg. Co., Ltd., Stratford, Ont.

CHAIRS, rattan and upholstered

Imperial Rattan Co., Ltd., Stratford, Ont.

CHEMICALS

*The Grasselli Chemical Co., Ltd., Toronto.
*The Nichols Chemical Co., Ltd., Montreal.

CHEMICAL LABORATORY APPARATUS

The Geo. M. Hendry Co., Ltd., Toronto, Ont.

CHICLETS AND CHEWING GUM

Canadian Chewing Gum Co., Ltd., Toronto.

CIGARS

Ed. Youngheart & Co., Ltd., Montreal, Que.

CIGARETTES AND TOBACCO

Philip Morris & Co., Ltd., Montreal, Que.

CIRCULAR CUTTERS, solid steel

The Peter Hay Knife Co., Ltd., Galt, Ont.

CLAM SHELL BUCKETS

*M. Beatty & Sons, Ltd., Welland, Ont.

CLOCKS AND CLOCK MOVEMENTS

The Arthur Pequegnat Clock Co., Berlin, Ont.

CLOCKS, TIME

*International Time Recording Co. of Canada, Ltd., Toronto.

CLOCKS, WATCHMEN'S

*The General Fire Equipment Co., Ltd., Toronto, Ont.

CLOSET SEATS

*Canadian H. W. Johns-Manville Co., Toronto.
*Goderich Organ Co., Goderich, Ont.

CLOTHING

John W. Peck & Co., Ltd., Montreal, Que.
MacKenzie & Co., Ottawa, Canada.
*Smart-Woods, Ltd., Montreal, Que.

CLOTHING, leather and sheepskin lined coats

A. R. Clarke & Co., Ltd., Toronto.

CLOTHING, Mackinaw

The Carss Mackinaw Clothing Co., Ltd., Orillia, Ont.

CLOTHES LINES, cotton

Hamilton Cotton Co., Hamilton, Ont.

CLUTCHES.

*Dodge Mfg. Co., Ltd., Toronto.

CLUTCHES, conveyors.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

COAL

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
Standard Fuel Co., Toronto.

COBALT OXIDE

The Coniagas Reduction Co., Ltd., St. Catharines, Ont.

COCOA AND CHOCOLATE PREPARATIONS

Walter Baker & Co., of Canada, Ltd., Montreal, Que.

COFFEE

S. H. Ewing & Sons, Montreal, Que.

COFFEE IMPORTERS, Roasters and Manufacturers

O. H. Cochrane & Co., Ottawa, Ont.

COLD DRAWN SCREW STEEL:

*Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD DRAWN SHAPES, flats, squares and hexagons:

*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

COLD STORAGE DOORS

John Hillock & Co., Ltd., Toronto.

COLLAR BUTTONS

The Arlington Co., of Canada, Ltd., Toronto.

COLLARS

The Standard Shirt Co., Ltd., Montreal, Que.

COLLARS, coated linen

Parsons & Parsons Canadian Co., Hamilton, Ont.

COLLARS AND CUFFS waterproof

Williams, Greene & Rome, Berlin, Ont.

COLOES

Brandram-Henderson Ltd., Montreal, Que.

A. Ramsay & Son Co., Montreal, Que.

Sherwin Williams Co. of Canada, Ltd., Montreal, Que.

COMBS, fine dressing and name

The Arlington Co. of Canada, Ltd., Toronto.

COMMERCIAL STATIONERS

Rolph & Clark, Ltd., Toronto.

COMMERCIAL STATIONERY:

*Brown Bros., Ltd., Toronto.
*Morton, Phillips & Co., Montreal.

CONCENTRATORS:

*Jenckes Machine Co., Sherbrooke.

CONCRETE COATINGS, paints, etc.

The Imperial Varnish & Color Co., Ltd., Toronto.

CONDUITS FOR INTERIOR WIRING

*Conduits Company, Ltd., Toronto.

CONFECTIONERY

Ganong Bros., Ltd., St. Stephens, N.B.

Moirs, Limited, Halifax, N.S.

The Montreal Biscuit Co., Montreal, Que.

CONTRACTORS' PLANT

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

*M. Beatty & Sons, Ltd., Welland, Ont.

CONVEYORS:

*Dodge Mfg. Co., Ltd., Toronto.
*Jenckes Machine Co., Sherbrooke.

COOLING APPARATUS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

COPPER:

*Eugene F. Phillips, Electrical Works, Ltd., Montreal.
*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPER SHEETS AND PLATES

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.
*Tallman Brass & Metal Co., Hamilton.

COPPERSMITHS

*The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

COPPER TUBING, seamless

Canadian Seamless Wire Co., Ltd., Toronto.

*Booth-Coulter Copper & Brass Co., Ltd., Toronto.

COPPERWARE AND LANTERNS

Sheet Metal Products Co. of Canada, Ltd., Toronto.

COPPER WIRE

Canadian Seamless Wire Co., Ltd., Toronto.

CORKS

S. H. Ewing & Sons, Montreal, Que.

CORK CARPET

Dominion Oil Cloth Co., Ltd., Montreal, Que.

CORRUGATED BOXES:

*Hinde & Dauch Paper Co., Toronto.

*Martin Corrugated Paper & Box Co., Ltd., Toronto.

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORRUGATED PAPER:

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

CORSETS

Dominion Corset Co., Quebec, Que.

COTTONS

*Dominion Textile Co., Ltd., Montreal.

*Montreal Cottons, Ltd., Valleyfield, P.Q.

COTTONADES

Hamilton Cotton Co., Hamilton, Ont.

COUPLERS

*Canadian Steel Foundries, Ltd., Welland, Ont.

CRANES

*Northern Crane Works, Walkerville.

COUPLINGS:

*Dodge Mfg. Co., Ltd., Toronto.

CRANKSHAFTS

Canada Forge Co., Ltd., Welland, Ont.

CREAM CHEESE, Ingersoll

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

CREAM SEPARATORS AND MILK CLARIFIERS

De Laval Dairy Supply Co., Ltd., Montreal, Que.

CREAMERY AND CHEESE FACTORY MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Peterboro, Ont.

CREOSOTED MATERIALS:

*The Dominion Creosoting Co., Ltd., Vancouver, B.C.

*Paterson Manufacturing Company, Toronto and Montreal.

CRUSHED STONE

The Hagersville Contracting Co., Ltd., Hagersville, Ont.

CRUSHING ROLLS:

*Jenckes Machine Co., Sherbrooke.

CUES

Samuel May & Co., Toronto.

CUPOLAS,

*Sheldons, Ltd., Galt.
Northern Crane Works, Limited, Walkerville.

CUPS, presentation

Standard Silver Co., Toronto.

CUPS, grease and oil

*The Canadian Winkley Co., Ltd., Windsor, Ont.

CURLED HAIR

Delany & Pettit, Ltd., Toronto.

CURTAINS, chenille

Hamilton Cotton Co., Hamilton, Ont.

CUTLERY

Standard Silver Co., Toronto.
Canadian Wm. A. Rogers, Ltd.

DENIMS

Hamilton Cotton Co., Hamilton, Ont.

DERAILS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

DESIGNERS

Ontario Engraving Co., Hamilton, Ont.

DESIGNERS and PRINTERS OF BOOKLETS, ETC.

Grip, Ltd., Toronto.

DINING ROOM SUITES

The George McLagan Furniture Co., Limited, Stratford, Ont.

DIES

*Butterfield & Co., Rock Island, P.Q.

DISINFECTING APPARATUS

Spramotor Co., London, Ont.

DOOR HANGERS

*Richards Wilcox Canadian Co., Ltd., London, Ont.

DRAPERY AND UPHOLSTERY GOODS

Daly & Morin, Montreal, Que.

DREDGES

*M. Beatty & Sons, Ltd., Welland, Ont.

DRESSING, belt

Sadler & Haworth, Montreal, Que.

DRESS AND CLOAK TRIMMINGS

J. Henry Peters Co., 1 Mincing St., Toronto.

DRILLS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

DRIFT BOLTS OR SPIKES

London Rolling Mill Co., Ltd., London, Ont.

DROP FORGINGS:

*Canadian Billings & Spencer, Ltd., Welland.

DRY CELLS, electric

Canadian Carbon Co., Ltd., Toronto.

DRY COLORS

P. D. Dods & Co., Ltd., Montreal, Que.

The Imperial Varnish & Color Co., Ltd., Toronto.

R. C. Jamieson & Co., Ltd., Montreal, Que.

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

DRY KILN EQUIPMENT

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

DUMB WAITERS

Turnbull Elevator Mfg. Co., Toronto.

DURABLE WIRE ROPE

The Dominion Wire Rope Co., Ltd., Montreal.

DYNAMITE

Canadian Explosives Ltd., Montreal, Que.

DYNAMOS.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

DYNAMOS, plating

*Jones & Moore Electric Co., Ltd., Toronto.

EIDERDOWN

Galt Knitting Co., Ltd., Galt.

ELECTRIC APPLIANCES.

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

ELECTRICAL COMPOUNDS

Standard Paint Co. of Canada, Ltd., Montreal, Que.

ELECTRICAL AND GAS FIXTURES

The Garth Co., Montreal, Que.

The James Morrison Brass Mfg. Co., Ltd., Toronto.

*Tallman Brass and Metal Co., Hamilton, Ont.

ELECTRIC LAMPS.

*Packard Electric Co., Ltd., Toronto.

ELECTRIC PLATE WARE

Roden Bros., Ltd., Toronto.

ELECTRIC BATTERIES

Canadian Carbon Co., Ltd., Toronto.

ELECTROTYPING

Central Press Agency, Toronto

ELECTRICAL SUPPLIES,

*Canadian Westinghouse Co., Ltd., Hamilton.

*Jones & Moore Electric Co., Ltd., Toronto.

*Northern Electric Co., Limited, Montreal.

ELECTRO-SILVER PLATED WARE

Standard Silver Co., Toronto.

ELEVATORS:

*Jenckes Machine Co., Sherbrooke
Turnbull Elevator Mfg. Co., Toronto.

*The Watrous Engine Works Co., Ltd., Brantford.

Northern Crane Works, Limited, Walkerville.

ELEVATORS FOR ALL PURPOSES

*The Watrous Engine Works Co., Ltd., Brantford.

ELEVATOR GATES AND DOORS

Turnbull Elevator Mfg. Co., Ltd., Toronto.

ELEVATOR GUARDS

*The Geo. B. Meadows, Toronto
Iron and Brass Goods Works Co., Ltd., Toronto.

*Canada Wire and Iron Works, Hamilton.

ELEVATORS, hydraulic and electric

John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.

EMERY DRESSERS and STANDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY GRINDERS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEELS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL GUARDS

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

EMERY WHEEL Safety Flanges

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

ENAMELS

R. C. Jamieson & Co., Ltd., Montreal, Que.

ENAMEL MANUFACTURERS AND DECORATORS

Standard Paint & Varnish Co., Ltd., Windsor, Ont.

ENAMEL AND TIN WARE

McClary Mfg. Co., London, Ont.

ENGINES

*E. Leonard & Sons, London.

*The Canadian Sirocco Co., Windsor, Ont.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

J. & R. Weir, Montreal, Que.

*Polson Iron Works, Ltd., Toronto.

*Sheldons, Ltd., Galt.

*The Watrous Engine Works Co., Ltd., Brantford.

*Massey-Harris Co., Ltd., Toronto

ENGINES, gas and gasoline

Goold-Shapley-Muir Co., Ltd., Brantford, Ont.

*Massey-Harris Co., Ltd., Toronto

*Sawyer-Massey Co., Ltd., Hamilton, Ont.

*Sawyer-Massey Co., Ltd., Hamilton, Ont.

*Sawyer-Massey Co., Ltd., Hamilton, Ont.

*Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGINES, steam plowing and threshing

Sawyer-Massey Co., Ltd., Hamilton, Ont.

Sawyer-Massey Co., Ltd., Hamilton, Ont.

Sawyer-Massey Co., Ltd., Hamilton, Ont.

Sawyer-Massey Co., Ltd., Hamilton, Ont.

Sawyer-Massey Co., Ltd., Hamilton, Ont.

ENGRAVERS, wood

Ontario Engraving Co., Hamilton, Ont.

ENGRAVERS AND PRINTERS, steel plate

American Bank Note Co., Ottawa, Ont.

American Bank Note Co., Ottawa, Ont.

ENGRAVERS AND PRINTERS, banknote

American Bank Note Co., Ottawa, Ont.

ENGRAVING:

*J. L. Jones Engraving Co., Toronto.

ENGRAVING, copper and steel plate

Pritchard-Andrews Co., of Ottawa, Ltd., Ottawa.

ENSILAGE AND STRAW CUTTERS

J. Fleury's Sons, Aurora, Ont.

ENVELOPES

Barber-Ellis Co., Ltd., Toronto.

Canada Envelope Co., Montreal, Que.

ENVELOPES, Transos,

Business Systems, Ltd., Toronto.

EXCELSIOR

*Delany and Pettit, Ltd., Toronto, Ont.

EXCELSIOR PADS

*Delany and Pettit, Ltd., Toronto, Ont.

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

EXPERTS IN PATENT CAUSES

Midout & Maybee, Toronto.

EXPLOSIVES, high

Canadian Explosives Ltd., Montreal, Que.

FACE PLATE JAWS

Ker & Goodwin, Brantford, Ont.

FACTORY SUPPLIES, cheese and creamery

De Laval Dairy Supply Co., Ltd., Montreal, Que.

J. Henry Peters Co., 1 Mincing St., Toronto.

FANS:

*The Canadian Sirocco Co., Windsor, Ont.

*Sheldons, Ltd., Galt.

FASTENERS, belt

*Sadler & Haworth, Montreal, Que.

FENCES and GATES:

*Dennis Wire & Iron Works Co., London.

*Canada Wire and Iron Works, Hamilton.

*Canada Wire and Iron Goods Co., Hamilton.

FENCING AND GATES, woven wire

Banwell Hoxie Wire Fence Co., Hamilton, Ont.

*Canada Wire and Iron Goods Co., Hamilton.

*Canada Wire and Iron Goods Co., Hamilton.

FENCING, wire

The Great West Wire Fence Co., Ltd., Winnipeg, Man.

C. H. Johnson & Sons, Ltd., Montreal, Que.

FIBRE PAIS:

*The E. B. Eddy Co., Ltd., Hull.

FILES

Henry Disston & Sons, Ltd., Toronto.

*The Nicholson File Co., Port Hope, Ont.

FIRE ALARMS,

*Northern Electric Co., Limited, Montreal.

FIRE DOOR HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.

FIRE ENGINES:

*Watrous Engine Works Co., Ltd., Brantford.

FIRE ESCAPES:

*Canada Wire and Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

FIRE EXTINGUISHERS

*The Booth-Coulter Copper and Brass Co., Ltd., Montreal, Que.

*Canadian H. W. Johns-Manville Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE FIGHTING APPARATUS

*Watrous Engine Works Co., Ltd., Brantford.

FIRE HOSE

*Canadian Consolidated Rubber Co., of Canada, Ltd., Montreal, Que.

Dunlop Tire and Rubber Goods Co., Limited, Toronto.

*Gutta Percha & Rubber, Ltd.

FIRE PREVENTION MATERIAL.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.

*Eureka Mineral Wool & Asbestos Co., Toronto.

*The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE-PROOF WINDOWS AND DOORS

*Pedlar People Ltd., Oshawa, Ont.

FIRE SPEINKLER SYSTEMS.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.
 *The General Fire Equipment Co., Ltd., Toronto, Ont.

FIRE AND WATER DEPARTMENT SUPPLIES.

*Chicago Bridge & Iron Works, Bridgeburg, Ont.
 The Garth Co., Montreal, Que.

FISH, Atlantic Sea-Foods
 Maritime Fish Corporation Ltd., Montreal.**FITTINGS FOR SOIL PIPE**
 Anthes Foundry, Ltd., Toronto.**FITTINGS, steam**
 Warden King, Ltd., Montreal, Que.**FLAGS**

*Scythes & Co., Ltd., Toronto.
 *Smart-Woods, Ltd., Montreal.

FLASHLIGHTS

Canadian Carbon Co., Toronto.

FLOORING, hardwood

Seaman Kent Co., Ltd., Meaford, Ont.

FLUE LINERS

Standard Clay Products, Ltd., St. Johns, Que.

FORGES:

*Sheldons, Ltd., Galt.

FORGINGS

Canada Forge Co., Ltd., Welland, Ont.
 *The Steel Co. of Canada, Ltd., Hamilton.

FORGINGS, DROP

*Dominion Stamping Co., Walkerville, Ont.

FOUNDRY EQUIPMENT

Northern Crane Works, Limited, Walkerville.

FOUNTAIN FRUITS and Juices
 J. J. McLaughlin, Ltd., Toronto.**FRICTION CLUTCH PULLEYS:**

*Dodge Mfg. Co., Ltd., Toronto.

FROGS AND CROSSINGS, manganese

Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.

FUEL

Standard Fuel Co., Toronto.

FUR GARMENTS, men's and women's

Holt, Renfrew, Ltd., Quebec.

FUR GOODS

John W. Peck & Co., Ltd., Montreal, Que.

FUR TRIMMINGS, ornaments and buttons

J. Henry Peters Co., 1 Mincing St., Toronto.

FURNACES

Gurney Foundry Co., Ltd., Toronto.
 McClary Mfg. Co., London, Ont.
 The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

FURNACES, hot air

Bedford Stove Co., Bedford, Que.

FURNITURE, hall

The George McLagan Furniture Co., Ltd., Stratford, Ont.

FURNITURE, house and office

Canada Furniture Mfrs., Ltd., Woodstock, Ont.

FURNITURE, office

The Canadian Office and School Furniture Co., Ltd., Preston, Ont.

FURNITURE, reed and rattan

Imperial Rattan Co., Ltd., Stratford, Ont.

GALVANIZED IRON:

*A. C. Leslie & Co., Montreal.

GALVANIZERS

Acme Stamping & Tool Works Ltd., Hamilton, Ont.
 *Ontario Wind Engine and Pump Co., Ltd., Toronto.

GASOLINE ENGINES

*Ontario Wind & Pump Co., Ltd., Toronto.
 De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

GASOLINE FIRE ENGINES

*The Watrous Engine Works Co., Ltd., Brantford.

GASOLINE MOTORS, "Imperial" Marine

Bruce Stewart & Co., Ltd., Charlottetown, P.E.I.

GASOLINE STORAGE SYSTEMS, special underground

S. F. Bowser & Co., Toronto.

GASOLINE

*The Imperial Oil Co., Ltd., Toronto.

GEARS, CUT

Hamilton Gear & Machine, Toronto.

GENERATORS:

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.
 *Canadian Westinghouse Co., Ltd., Hamilton.

GINS

The Melchers Gin & Spirits Distillery Co., Ltd., Montreal, Que.

GLASSWARE

Dominion Glass Co., Ltd., Montreal, Que.

GLASSWARE, cut

Roden Bros., Ltd., Toronto.

GLASS FOR BUILDINGS

Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS BENDERS

Toronto Plate Glass Importing Co., Ltd., Toronto.

GLASS, mirror

Toronto Plate Glass Importing Co., Ltd., Toronto.

GLOVES AND MITTS

A. R. Clarke & Co., Ltd., Toronto.
 Craig, Cowan Co., Limited, Toronto.

GLUE

Delany and Pettit, Ltd., Toronto, Ont.

GOLD FILLED WIRE AND PLATE

Canadian Seamless Wire Co., Toronto.

GOLD AND SILVER REFINERS

Canadian Seamless Wire Co., Toronto.

GRAIN CRUSHERS (Rapid Easy)

J. Fleury's Sons, Aurora, Ont.

GRAPE JUICE

J. J. McLaughlin, Ltd., Toronto.

GRATES.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

GRAVITY CARRIERS

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

GRILLES, metal

*Canada Wire & Iron Goods Co., Hamilton.
 *Dennis Wire & Iron Works Co., London.

GRINDERS, Pedestal and Bench.

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING and Polishing Machinery

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

GRINDING WHEELS:

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

*The Dominion Abrasive Wheel Co., Ltd., New Toronto.

GRINDSTONES

*Richards Wilcox Canadian Co., Ltd., London, Ont.

GUNN SECTIONAL BOOKCASES

The Geo. McLagan Furniture Co., Limited, Stratford, Ont.

GUY ANCHORS

B. J. Coghlin Co., Ltd., Montreal

GYPSUM, crushed

*Albert Mfg. Co., Hillsborough, N.B.

GYPSUM PRODUCTS

*Manitoba Gypsum Co., Ltd., Winnipeg, Man.
 De Laval Dairy Supply Co., Ltd., Peterboro, Ont.

HALL FURNITURE

The Geo. McLagan Furniture Co., Ltd., Stratford, Ont.

HAMS

F. W. Fearman Co., Ltd., Hamilton, Ont.

HANGERS.

*Dodge Mfg. Co., Ltd., Toronto.
 *The Goldie & McCulloch Co., Ltd., Galt, Ont.

HARDWARE

*Richards Wilcox Canadian Co., Ltd., London, Ont.
 Taylor-Forbes Co., Ltd., Guelph, Ont.

The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

HARDWOOD FLOORING

Wilson Bros. Ltd., Collingwood Ont.

HARDWOOD INTERIOR FINISH

Wilson Bros., Ltd., Collingwood, Ont.

HARDWOOD VENEER DOORS TO DETAIL

Wilson Bros., Ltd., Collingwood Ont.

HARNESS

Lamontagne Ltd., Montreal, Que.

HATS, men's straw

The Crown's Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's straw

The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' and children's felt and beaver

The Crown Hat Co., Ltd., Galt, Ont.

HATS, ladies' felt and straw

Toronto Hat Mfg. Co., Toronto.

HAULAGE, Wire Rope

The Dominion Wire Rope Co., Ltd., Montreal.

HEATERS

*The Canadian Sirocco Co., Windsor, Ont.
 *Watrous Engine Works Co., Ltd., Brantford.

HEATERS, feed water:

*The Goldie & McCulloch Co., Ltd., Galt.

HEATING APPLIANCES:

*Sheldons, Ltd., Galt.

HEATING SYSTEMS

Gurney Foundry Co., Ltd., Toronto.

HESSIANS

The Canadian Bag Co., Ltd., Montreal, Que.

*Scythes & Co., Ltd., Toronto.

*Smart-Woods, Ltd., Montreal.

HINGES:

*The Steel Co. of Canada, Ltd., Hamilton.

HOISTS

*M. Beatty & Sons, Ltd., Welland, Ont.

Northern Crane Works, Limited, Walkerville.

HOISTS, electric and pneumatic.

*M. Beatty & Sons, Ltd., Welland, Ont.

Northern Crane Works, Limited, Walkerville.

HOISTING MACHINERY.

*M. Beatty & Sons, Ltd., Welland, Ont.

Northern Crane Works, Limited, Walkerville.

HOSE, fire

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
 Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

HOSE, half, Imperial

Kingston Hosiery Co., Ltd., Kingston, Ont.

HOSE, rubber.

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
 Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber, Limited.

HUMIDIFIERS

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

HYDRAULIC PRESSES

Bawden Machine Co., Ltd., Toronto.

ICE CREEPERS

Parmenter & Bulloch Co., Ltd., Gananoque, Ont.

ICE-MAKING MACHINERY

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INCUBATORS & BROODERS

Lee Mfg. Co., Ltd., Pembroke, Ont.

INDEX CARDS

Business Systems, Ltd., Toronto.

INJECTORS, automatic and autopoitive

Penberthy Injector Co., Ltd., Windsor, Ont.

INSULATION, patent seamless cork

*Canadian H. W. Johns-Manville Co., Toronto.

The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.

INTERLOCKING RUBBER TILING

*Dunlop Tire & Rubber Goods Co., Ltd., Toronto.

*Gutta Percha & Rubber Mfg. Co., of Toronto, Ltd., Toronto.

INVERTS

Standard Clay Products, Ltd., St. Johns, Que.

IRON:

*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.

IRON, refined bar

Starr Mfg. Co., Ltd., Dartmouth, N.S.

IRON PUMPS.

*The Bawden Machine Co., Limited, Toronto.

IRON STAIRWAYS:

*Canada Wire & Iron Goods Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

IRONWORK, achitectural

*Canada Wire & Iron Goods Co., Hamilton.

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRONWORK, ornamental

*Canada Wire & Iron Goods Co., Hamilton.

The Western Steel & Iron Co., Ltd., Winnipeg, Man.

IRON, LEAD AND PUTTY

A. R. Whittall, Montreal.

JAM, canned goods, etc.

E. D. Smith & Son, Limited.

JAPANS, enamels, etc.

A. Muirhead Co., Ltd., Toronto.

JOINTERS:

*Berlin Machine Works, Ltd., Hamilton.

JELLY POWDER

S. H. Ewing & Sons, Montreal, Que.

JEWELRY, enamelled souvenir

Caron Bros., Montreal, Que.

JEWELRY, gold filled

Caron Bros., Montreal, Que.

JOIST HANGERS

*Richards-Wilcox Canadian Co., Ltd., London, Ont.

KELSEY WARM AIR GENERATOR

The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.

KILNS:

*Sheldons, Ltd., Galt.

KINDLING

Standard Fuel Co., Toronto.

KNIFE GRINDERS:

*W. H. Banfield & Sons, Toronto.

KNITTED GOODS:

*Penman's, Ltd., Paris, Ont.

KNIVES

Henry Disston and Sons, Toronto, Ont.

The Peter Hay Knife Co., Ltd., Galt, Ont.

Simonds Canada Saw Co., Ltd., Montreal, Que.

KNIVES, pulp and paper

Henry Disston and Sons, Toronto, Ont.

The Peter Hay Knife Co., Ltd., Galt, Ont.

KODAKS AND PHOTOGRAPHIC SUPPLIES

Canadian Kodak Co., Ltd., Toronto.

LABELS

Lawson & Jones Ltd., London, Ont.

LABELS, lithographed

Harris Lithographing Co., Toronto.

LACE LEATHER

F. C. McCordick, St. Catharines, Ont.

*Sadler & Haworth, Montreal, Que.

*The D. K. McLaren Belting Co., Ltd., Montreal.

*The J. C. McLaren Belting Co., Ltd., Montreal.

LADDEES

Stratford Mfg. Co., Ltd., Stratford, Ont.

LADDEES, step

*Otterville Mfg. Co., Ltd., Otterville, Ont.

LADLES, foundry

Northern Crane Works, Limited, Walkerville.

LAGER

E. L. Drewry, Winnipeg, Man.

LARD

F. W. Fearman Co., Ltd., Hamilton, Ont.

LATH

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

LATHE CHUCKS

Ker & Goodwin, Brantford, Ont.

LATHE-DOGS:

Canadian Billings & Spencer Ltd., Welland.

LAUNCHES

Peterboro Canoe Co., Ltd., Peterboro, Ont.

LAWN MOWERS

Taylor-Forbes Co., Ltd., Guelph, Ont.

LAWN SWINGS

Stratford Mfg. Co., Ltd., Stratford, Ont.

LAVATORIES, enameled

Amherst Foundry Co., Ltd., Amherst, N.S.

LAUNDRY SINKS

Amherst Foundry Co., Ltd., Amherst, N.S.

LEAD

*The Consolidated Mining and Smelting Co. of Canada, Ltd., Trail, B.C.

LEAD GRINDERS

Benjamin Moore & Co., Ltd., Toronto.

LEAD SHEET

Toronto Plate Glass Importing Co., Ltd., Toronto.

LEAD PIPE

*The Steel Co. of Canada, Ltd., Hamilton.
Toronto Plate Glass Importing Co., Ltd., Toronto.
*The Canada Metal Co., Toronto.

LEATHER

The Robson Leather Co., Ltd., Oshawa.

LEATHER, bookbinders'

Clarke & Clarke, Ltd., Toronto.

LEATHER, fancy

Clarke & Clarke, Ltd., Toronto.

LEATHER GOODS

Lamontagne, Ltd., Montreal, Que.

LEATHER, hemlock sole

The Breithaupt Leather Co., Ltd., Berlin, Ont.

LEATHER, patent colt and side leather

A. R. Clarke & Co., Ltd., Toronto.

LEATHER, sheep skin, etc.

Clarke & Clarke, Ltd., Toronto.

LEATHER, upholstering.

Clarke & Clarke, Limited, Toronto.

LEATHER, upper

A. Davis & Son, Ltd., Kingston, Ont.

LINK BELTING.

*The Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.

LINOLEUM

Dominion Oil Cloth Co., Ltd., Montreal, Que.

LITHOGRAPHED BUSINESS STATIONERY

Business Systems, Ltd., Toronto.

LITHOGRAPHED TIN WARE:

*MacDonald Mfg. Co., Ltd., Toronto.

LITHOGRAPHERS

American Bank Note Company, Ottawa, Ont.

Harris Lithographing Co., Toronto.

*Montreal Lithographing Co., Montreal.

Stone, Limited, Toronto.

Rolph & Clark Ltd., Toronto.

LOCKERS:

*Canada Wire & Iron Works Co., Hamilton.

*Dennis Wire & Iron Works Co., London.

*Geo. B. Meadows, Wire, Iron and Brass Wks. Co., Toronto.

LOCOMOTIVE BLOCKS

Standard Clay Products, Ltd., St. Johns, Que.

LOCOMOTIVES, industrial

*Montreal Locomotive Works, Ltd., Montreal.

LOCOMOTIVE & MARINE BRASS WORKS

The James Morrison Brass Mfg. Co., Ltd., Toronto.

LOOSE LEAF, BINDERS AND FORMS

Business Systems, Ltd., Toronto.

LOOSE LEAF SYSTEMS

Copeland-Chatterton Co., Ltd., Toronto.

LOOSE LEAF SUPPLIES

The Esdale Press, Ltd., Edmonton.

LUBRICATORS, steam sight feed

Penberthy Injector Co., Ltd., Windsor, Ont.

LUGS, for silos and water tanks

*Otterville Mfg. Co., Ltd., Otterville, Ont.

LUMBER

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.
G. & J. Esplen, Montreal, Que.

LUMBER, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

*Eureka Mineral Wool & Asbestos Co., Toronto.

LUMBERING BLANKETS.

Slingsby Mfg. Co., Ltd., Brantford, Ont.

LUMBER, red pine and spruce

Gillies Bros., Ltd., Braeside, Ont.

LUMBER, spruce, fir, larch and cedar

Fernie Lumber Co., Ltd., Fernie, B.C.

LUMBER, white pine

Gillies Bros., Ltd., Braeside, Ont.

MACHINE TOOLS

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, brick:

*The Canadian Sirocco Co., Ltd., Windsor, Ont.
*Sheldons, Ltd., Galt.

MACHINERY, conveying.

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Jeffrey Mfg. Co., Montreal.

MACHINERY, elevating.

Canadian Mathews Gravity Carrier Co., Ltd., Toronto.

*The Goldie & McCulloch Co., Ltd., Galt, Ont.

*The Jeffrey Mfg. Co., Montreal.

MACHINERY, flour mill:

*The Goldie & McCulloch Co., Ltd., Galt.

MACHINERY, grinding

*Canadian Hart Wheels, Ltd., Hamilton, Ont.

MACHINERY, hoisting, etc.

*The Jeffrey Mfg. Co., Montreal.

*Polson Iron Works, Ltd., Toronto.

*J. & R. Weir, Montreal, Que.

*M. Beatty & Sons, Ltd., Welland, Ont.

Northern Crane Works, Limited, Walkerville.

MACHINERY, ice cream

J. J. McLaughlin, Ltd., Toronto.

MACHINERY, iron working

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, pulp mill

*The Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, pumping

*The Canadian Sirocco Co., Ltd., Windsor, Ont.

*The Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, punching and shearing

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, railroad and car shop

*John Bertram & Sons Co., Ltd., Dundas, Ont.

MACHINERY, roadmaking

Sawyer-Massey Co., Ltd., Hamilton, Ont.

*Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, sawmill

The E. Long Mfg. Co., Ltd., Orillia, Ont.

P. Payette & Co., Penetanguishene, Ont.

W. P. Plant, Hastings, Ont.

*Watrous Engine Works Co., Ltd., Brantford.

MACHINERY, special

Bawden Machine Co., Ltd., Toronto.

MACHINERY, tannery

W. P. Plant, Hastings, Ont.

MACHINERY, transmission

*Dodge Mfg. Co., Ltd., Toronto.

*Goldie & McCulloch Co., Ltd., Galt, Ont.

MACHINERY, wood working

*Berlin Machine Works, Ltd., Hamilton.

*The Watrous Engine Works Co., Ltd., Brantford.

MACHINE WRENCHES:

*Canadian Billings & Spencer, Ltd., Welland.

MACHINES, painting

Spramotor Co., London, Ont.

MAGNESITE

Canadian Carbonate Co., Ltd., Montreal, Que.

MAILING TUBES:

*Dominion Paper Box Co., Ltd., Toronto.

MALT:

*Hiram Walker & Sons, Ltd., Walkerville.

MAPS AND MAP MOUNTING

The Geo. M. Hendry Co., Ltd., Toronto.

MARTINGALE RINGS AND SLIDE LOOPS

The Arlington Co. of Canada, Ltd., Toronto.

MATCHERS:

*Berlin Machine Works, Ltd., Hamilton.

MATCHES:

*The E. B. Eddy Co., Ltd., Hull.

MEATS, canned

The Wm. Davies Co., Ltd., Toronto.

MECHANICAL DRAUGHT

*Canadian Sirocco Co., Windsor, Ont.

MECHANICAL STOKERS,

*The Jones Underfeed Stoker Co., Ltd., Toronto.

MEDICINES, patented and pharmaceutical

Dr. Ed. Morin & Cie., Ltd., Quebec.

METAL, babbitt

*Canada Metal Co., Toronto.

*Tallman Brass & Metal Co., Hamilton.

Alonzo W. Spooner, Limited, Port Hope, Ont.

METAL CEILING:

*Metallic Roofing Co., Ltd., Toronto.

*Metal Shingle & Siding Co., Ltd., Preston.

*Pedlar People, Ltd., Oshawa, Ont.

METAL ROOFING

*Pedlar People Ltd., Oshawa, Ont.

METAL, spinning and stamping

The Booth-Coulter Copper and Brass Co., Ltd., Toronto.

METAL SHINGLES:

*Metal Shingle & Siding Co., Ltd., Preston.

*The Metallic Roofing Co. of Canada, Ltd., Toronto, Ont.

*Pedlar People, Ltd., Oshawa, Ont.

METAL SIDING:

*Metallic Roofing Co., Ltd., Toronto.

*Metal Shingle & Siding Co., Ltd., Preston.

*Pedlar People, Ltd., Oshawa, Ont.

MILK BOTTLE CAPS

Business Systems, Ltd., Toronto.

MILK DEALERS' MACHINERY AND SUPPLIES

De Laval Dairy Supply Co., Ltd., Montreal, Que.

MILLBOARD, asbestos:

*Canadian H. W. Johns-Manville Co., Toronto.

*Eureka Mineral Wool & Asbestos Co., Toronto.

MILLING CUTTERS

Pratt and Whitney Company of Canada, Dundas, Ont.

MITTS AND GLOVES (Indian tan, red deerskins)

Holt, Renfrew Ltd., Quebec, Que.

A. R. Clarke & Co., Ltd., Toronto.

MOCCASINS AND SLIPPERS (Indian tanned leathers)

Holt, Renfrew, Ltd., Quebec, Que.

MORTISES:

*Berlin Machine Works, Ltd., Hamilton.

MOTOR CAR PARTS AND ACCESSORIES

*Russell Motor Car Co., Ltd., Toronto.

MOTORS:

*Canadian Crocker-Wheeler Co., Ltd., St. Catharines.

*Canadian Westinghouse Co., Ltd., Hamilton.

MOTORS, D.C.

*Canadian Crocker Wheeler Co., St. Catharines, Ont.

MOTORS, electric (alternating current)

*Canadian Westinghouse Co., Ltd., Hamilton.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

*The Canadian Crocker-Wheeler Co., Limited St. Catharines.

MOTORS, electric (direct current)

*Canadian Westinghouse Co., Ltd., Hamilton.

Consolidated Electric Co., Ltd., Toronto.

*Jones & Moore Electric Co., Ltd., Toronto.

MOTORS, electric (repairing)

Consolidated Electric Co., Ltd., Toronto.

MOTOR TRUCKS:

*The Gram Motor Truck Co., Ltd., Walkerville.

MOULDERS:

*Berlin Machine Works, Ltd., Hamilton.

NAILS:

*The Steel Co. of Canada, Ltd., Hamilton.

NAILS, copper

Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

NAILS, wire

Parmenter and Bulloch Co., Ltd., Gananoque, Ont.

The Graham Nail Works, Toronto.

NAME PLATES

Patterson and Heward, Toronto.

NAPHTHA

*The Imperial Oil Co., Ltd., Toronto.

NICKEL OXIDE

Coniagas Reduction Co., Ltd., St. Catharines, Ont.

NUTS:

*John Morrow Screw & Nut Co., Ltd., Ingersoll.

*The National Acme Mfg. Co., Montreal.

*Seythes & Co., Ltd., Toronto.

OAKUM, plumbers', Canadian Navy

Factory Waste and Metal Co., Montreal, Que.

*Seythes & Co., Ltd., Toronto.

OAT CRUSHERS AND FLAKERS

J. Fleury's Sons, Aurora, Ont.

OFFICE STATIONERY:

*The Montreal Lithographing Co., Ltd., Montreal.

OILS

Brandram-Henderson, Ltd., Montreal, Que.
A. Ramsay & Son Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.

OIL FILTRATION AND CIRCULATING SYSTEMS

S. F. Bowser & Co., Toronto.

OILERS AND OIL STOVES

Sheet Metal Products Co. of Canada, Ltd., Toronto.

OIL STORAGE SYSTEMS, self measuring

S. F. Bowser & Co., Toronto.

OIL COMPANIES

Commercial Oil Co., Ltd., Hamilton, Ont.

OILS (Petroleum products)

*British American Oil Co., Ltd., Toronto.

OILS, Petroleum

*The Imperial Oil Co., Ltd., Toronto.

OILS, road

*Paterson Manufacturing Company, Toronto and Montreal.

OILCLOTHS, floor and table

Dominion Oil Cloth Co., Ltd., Montreal, Que.

OFFICE DESKS

*Goderich Organ Co., Goderich, Ont.

ORGANS

*Goderich Organ Co., Goderich, Ont.
Thomas Organ & Piano Co., Woodstock, Ont.

ORGANS, pipe

Casavant Freres, St. Hyacinthe, Que.

ORGANS, parlour

Goderich Organ Co., Goderich.

ORNAMENTAL IRON WORK:

*Canada Wire & Iron Goods Co., Hamilton.
*Dennis Wire & Iron Works Co., London.
*The Geo. B. Meadows, Toronto Iron and Brass Goods Works, Co., Ltd., Toronto.

OVENS, portable bake

Bedford Stove Co., Bedford, Que.

OVERALLS

Mackenzie & Co., Ottawa, Ont.
Peerless Overall Co., Rock Island, Que.
Walker Pant and Shirt Co., Walkerville and Chatham, Ont.
The Standard Shirt Co., Ltd., Montreal, Que.

OVERCOATINGS

Rosamond Woollen Co., Aumont, Ont.

OVERHEAD RUNWAYS.

*Richard-Wilcox Canadian Co., Limited, London, Ont.

PACKING BOXES

Barchard & Co., Ltd., Toronto.

PACKING, engine:

*Garlock Packing Co., Hamilton.

PACKING, rubber

*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
*Gutta Percha & Rubber, Ltd.
Jenkins Bros., Ltd., Montreal, Que.

PAIS AND TUBS, wooden

The C. Beck Mfg. Co., Ltd., Penetanguishene, Ont.

PAINTERS' SUPPLIES

A. Muirhead Co., Ltd., Toronto.

PAINTS

R. C. Jamieson & Co., Ltd., Montreal, Que.

PAINTS and VARNISHES:

A. Muirhead Co., Ltd., Toronto.
Benjamin Moore & Co., Ltd., Toronto.
Standard Paint & Varnish Co., Ltd., Windsor, Ont.
The Imperial Varnish & Color Co., Ltd., Toronto.
The Staneland Co., Ltd., Victoria, B.C.
A. Ramsay & Sons Co., Montreal, Que.
Sherwin-Williams Co. of Canada, Ltd., Montreal, Que.
*Ault & Wiborg Co. of Canada, Toronto.
*The Dougall Varnish Co., Ltd., Montreal.
Standard Paint Co. of Canada, Ltd., Montreal.

PAINTS, barn and bridge

Standard Paint and Varnish Co., Ltd., Windsor, Ont.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.

PAINTS, Preservative

Standard Paint Co. of Canada, Ltd., Montreal, Que.
*Paterson Manufacturing Company, Toronto and Montreal.

PAPER BOARDS

Bathurst Lumber Co., Ltd., Bathurst, N.B.

PAPER, book

Barber Paper & Coating Mills, Ltd., Georgetown, Ont.

PAPER BOXES

King Paper Box Co., Ltd., Montreal, Que.

*Rudd Paper Box Co., Ltd., Toronto.

PAPERS, bond

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, envelope

Provincial Paper Mills Ltd., Georgetown, Ont.
The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, KRAFT, wrapping printing and waterproof

*Beveridge Paper Co., Ltd., Montreal, Que.

PAPER, news

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPER, wrapping

*The Riordon Pulp and Paper Co., Montreal, Que.

PAPERS, building

Bathurst Lumber Co., Ltd., Bathurst, N.B.
*The Riordon Pulp and Paper Co., Montreal, Que.
Standard Paint Co. of Canada, Ltd., Montreal.

PAPER, coated, book and label

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated cover

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, coated box board

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, enamelled blotting

*Ritchie & Ramsay, Ltd., Toronto
Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, gummed tapes

Gummed Papers, Ltd., Brampton, Ont.

PAPER, label

Provincial Paper Mills Ltd., Georgetown, Ont.

PAPER, ledger

*Rolland Paper Co., Ltd., Montreal, Que.

The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, super-book

The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, wall

Stauntons, Ltd., Toronto.

PAPEE, writing

The Toronto Paper Mfg. Co. Cornwall, Ont.

PAPER, writing, high-grade

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER, writing, superfine

*Rolland Paper Co., Ltd., Montreal, Que.

PAPER BOXES:

*Dominion Paper Box Co., Toronto.

PARK SEATS

Stratford Mfg. Co., Ltd., Stratford, Ont.

PARLOR SUNDRIES

The Geo. McLagan Furniture Co. Limited, Stratford, Ont.

PATENTS

Fetherstonhaugh & Co., Toronto.
Ridout and Maybee, Toronto.

PATENT LITIGATION

Ridout and Maybee, Toronto.

PAY ROLL AUDITS

*International Time Recording Co. of Canada, Ltd., Toronto.

PEAS AND BEANS FOR SEED

W. P. Niles, Ltd., Wellington, Ont.

PERFORATED METALS:

*Canada Wire & Iron Goods Co., Hamilton.

PERFORATED MUSIC ROLLS

The Otto Higel Co., Limited, Toronto.

PERFUMES AND TOILET

PREPARATIONS
Sovereign Perfumes Ltd., Toronto.

PETROLEUM PRODUCTS

*The Imperial Oil Co., Ltd., Toronto.

PHOTOMAILERS

*The Thompson & Norris Co. of Canada, Ltd., Niagara Falls, Ont.

PIANOS

Dominion Organ & Piano Co., Ltd., Bowmanville, Ont.
*Gourlay, Winter and Leeming, Toronto.

PIANO ACTIONS

The Otto Higel Co., Ltd., Toronto.

PIANO KEYS

The Otto Higel Co., Ltd., Toronto.

PIANOS, player

*Gourlay, Winter & Leeming, Toronto.

PIANO, player actions

The Otto Higel Co., Ltd., Toronto.

PIANO STOOLS and BENCHES

*Goderich Organ Co., Goderich, Ont.

PICKLES:

The Wm. Davies Co., Ltd., Toronto.

PICKLES AND CATSUPS:

T. A. Lytle Co., Ltd., Toronto.

PIG IRON:

*The Steel Co. of Canada, Ltd., Hamilton.

PINE DOORS, SASH, MOULDINGS

ETC.
Wilson Bros., Ltd., Collingwood, Ont.

PINS, society, emblems and Badges.

Caron Bros., Montreal, Quebec.

PIPE, cast iron, for water and gas.

National Iron Works, Ltd., Toronto.

PIPE COUPLINGS:

*The Steel Co. of Canada, Ltd., Hamilton.

PIPE COVERINGS:

*Eureka Mineral Wood & Asbestos Co., Toronto.

PIPES, culvert

Standard Clay Products, Ltd., St. Johns, Que.

PIPE AND NIPPLES, black and

galvanized

*Canadian Tube & Iron Co., Ltd., Montreal, Que.

PIPE, sewer.

Hamilton and Toronto Sewer Pipe Co., Ltd., Hamilton, Ont.
Standard Clay Products, Ltd., St. Johns, Que.

PIPE, soil and fittings

Warden King Ltd., Montreal, Que.

PIPE AND TUBES, wrought

merchant
*Page-Hersey Iron, Tube and Lead Co., Ltd., Toronto.

PIPE, Threading and Cutting off

Machines
John H. Hall & Sons, Limited, Brantford, Ont.

PISTON RODS

*The Canadian Drawn Steel Co., Ltd., Hamilton.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.

PLANERS:

*Berlin Machine Works, Ltd., Hamilton.

PLANING MILLS

G. & J. Esplen, Montreal, Que.

PLASTER OF PARIS

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, hard wall

*Albert Mfg. Co., Hillsborough, N.B.

PLASTER, land

*Albert Mfg. Co., Hillsborough, N.B.

PLAYING CARDS:

*The Montreal Lithographing Co., Ltd., Montreal.

PLOWS

J. Fleury's Sons, Aurora, Ont.

PLUMBERS' SUPPLIES

The Garth Co., Montreal, Que.
The James Morrison Brass Mfg. Co., Ltd., Toronto.

PLUMBING APPLIANCES:

Standard Sanitary Mfg. Co., Ltd., Toronto.

PLUMBING SUPPLIES

Toronto Plate Glass Importing Co., Ltd., Toronto.

POLES, curtain

Daly & Morin, Montreal, Que.

POLES, telegraph and telephone,

cedar
Fernie Lumber Co., Ltd., Fernie, B.C.

PORK PACKERS AND CHEESE

EXPORTERS

The Ingersoll Packing Co., Ltd., Ingersoll, Ont.

POSTS, split cedar fence

Fernie Lumber Co., Ltd., Fernie, B.C.

POSTERS

Stone, Limited, Toronto.

POULTRY SUPPLIES AND MEDICINES

Lee Mfg. Co., Ltd., Pembroke, Ont.

POWDER, blasting

Canadian Explosives, Ltd., Montreal, Que.

POWER PRESSES:

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, baling

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Filter

William R. Perrin & Co., Ltd., Toronto.

PRESSES, Hydraulic

*Canadian Boomer & Boschert Press Co., Ltd., Montreal.

PRESSES, Veneer

William R. Perrin & Co., Ltd., Toronto.

PRINTED BUSINESS STATIONERY

Business Systems, Ltd., Toronto.

PRINTERS

Rous & Mann, Ltd., Toronto.
R. G. McLean, Toronto.

PRINTERS, catalogue:

R. G. McLean, Toronto.
*Southam Press, Ltd., Toronto and Montreal.

PRINTING AND LITHOGRAPHING

Lawson & Jones, Ltd., London, Ont.

PRODUCE

The Wm. Davies Co., Ltd., Toronto.

PROVISIONS

The Wm. Davies Co., Ltd., Toronto.

PULLEYS.

*Dodge Mfg. Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Jeffrey Mfg. Co., Montreal, Que.

- PULP, Bleached Sulphite**
The Edward Partington Pulp and Paper Co., St. John, N.B.
- PULP, Sulphide**
Bathurst Lumber Co., Ltd., Bathurst, N.B.
- PUMPS.**
Sproamotor Co., London, Ont.
*Canadian Fairbanks-Morse Co., Ltd., Montreal.
*Bawden Machine Co., Ltd., Toronto.
- PUMPS, ammonia**
*Bawden Machine Co., Ltd., Toronto.
- PUMPS, boiler feed.**
*Bawden Machine Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt.
- PUMPS, centrifugal**
*M. Beatty & Sons, Ltd., Welland Ont.
*Waterous Engine Works Co., Ltd., Brantford.
- PUMPS, iron**
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Waterous Engine Works Co., Ltd., Brantford.
- PUMPS, tar**
*Bawden Machine Co., Ltd., Toronto.
- PUMPS, turbine, and equipment**
*Bawden Machine Co., Ltd., Toronto.
- PUMPS (Turbine and reciprocating)**
John McDougall Caledonian Iron Works Co., Ltd., Montreal, Que.
- PYJAMAS AND NIGHT ROBES**
Williams, Greene & Rome, Berlin, Ont.
- RADIATORS**
Taylor-Forbes Co., Ltd., Guelph, Ont.
Warden King, Ltd., Montreal, Que.
- RAILINGS, brass and iron:**
*Dennis Wire & Iron Works Co., London.
- RAILWAY SIGNAL APPLIANCES**
General Railway Signal Co. of Canada, Ltd., Montreal, Que.
- RAILWAY SUPPLIES.**
*Canadian Steel Foundries, Ltd., Montreal.
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
B. J. Coghlin Co., Ltd., Montreal, Que.
- RAILWAY TARIFF BINDERS**
The Esdale Press Ltd., Edmonton.
- READY-TO-WEAR GARMENTS, Ladies'**
H. C. Boulter Co., Ltd., Toronto.
- BEAMERS**
Pratt and Whitney Co. of Canada, Dundas, Ont.
*Butterfield & Co., Rock Island, P.Q.
- "REDWOOD" lager**
E. L. Drewry, Winnipeg, Man.
- BEED AND RATTAN GOODS**
Canada Furniture Mfgs., Ltd., Woodstock, Ont.
- REFRIGERATORS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Lee Mfg. Co., Ltd., Pembroke, Ont.
- REFRIGERATING MACHINERY**
The Linde Canadian Refrigeration Co., Ltd., Montreal, Que.
- REFRIGERATORS, store, homes and institutions.**
Ham & Nott Co., Ltd., Brantford, Ont.
John Hillock & Co., Ltd., Toronto.
- REINFORCEMENT for concrete:**
*Canada Wire & Iron Goods Co., Hamilton.
*Pedlar People Ltd., Oshawa, Ont.
- RINGS, gold**
Caron Bros., Montreal, Que.
- RIVETS:**
Canadian Tube & Iron Co., Ltd., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.
- RIVETS, bifurcated and tubular**
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
- RIVETS AND BUEERS, iron, copper and brass**
Parmenter & Bulloch Co., Ltd., Gananoque, Ont.
- ROLLERS, shade**
Daly & Morin, Montreal, Que.
- ROOFING, metal**
*Metallic Roofing Co., Ltd., Toronto.
*Metal Shingle & Siding Co., Ltd., Preston.
- ROOFING, ready to lay**
*Canadian H. W. Johns-Manville Co., Toronto.
Standard Paint Co. of Canada, Ltd., Montreal, Que.
*Paterson Manufacturing Company, Toronto and Montreal.
- ROOFINGS**
*Bird & Son, Hamilton, Ont.
- ROOF TRUSSES**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
- ROPE**
*Doon Twines Ltd., Doon, Ont.
- ROPE, cotton**
Hamilton Cotton Co., Hamilton Ont.
- RUBBER FOOTWEAR**
Ames Holden, McCready, Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., The Miner Rubber Co., Ltd., Granby, Que.
*Smart-Woods, Ltd., Montreal.
- RUBBER GOODS.**
*Canadian Consolidated Rubber Co., Ltd., Montreal, Que.
*Gutta Percha & Rubber, Ltd., Ltd., Toronto.
*Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
- RUBBER MOULDS**
Bawden Machine Co., Ltd., Toronto
- RULES**
The Lufkin Rule Co. of Canada Ltd., Windsor, Ont.
- EYE**
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
- SADDLERY HARDWARE**
*Dominion Stamping Co., Walkerville, Ont.
- SAFES**
*Goldie & McCulloch Co., Ltd., Galt, Ont.
- SAMPLE CASES**
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
J. Eveleigh & Co., Ltd., Montreal, Que.
- SANDERS:**
*Berlin Machine Works, Ltd., Hamilton.
- SANDPAPER**
Delany and Pettit, Ltd., Toronto, Ont.
- SASH CORD, cotton**
Hamilton Cotton Co., Hamilton Ont.
- SALT**
Canadian Salt Co., Ltd., Windsor Ont.
- SANITARY PAPER TOWELS:**
*E. B. Eddy Co., Ltd., Hull.
- SAW SHARPENING MACHINERY**
*Canadian Hart Wheels, Ltd., Hamilton, Ont.
- SAWS**
Henry Disston & Sons, Ltd., Toronto.
Shurly & Deitrich, Galt, Ont.
- SAWS, band:**
*Berlin Machine Works, Ltd., Hamilton.
- SAWS, crosscut**
*Berlin Machine Works, Ltd., Hamilton.
- SAWS, crosscut and oand**
Shurly & Deitrich, Galt, Ont.
- SAWS, circular mill**
Shurly & Deitrich, Galt, Ont.
- SAWS, hack:**
*Victor Saw Works, Ltd., Hamilton, Ont.
- SAWS, of all kinds**
Simonds Canada Saw Co., Ltd., Montreal, Que.
- SAWS, rip:**
*Berlin Machine Works, Ltd., Hamilton.
Shurly & Deitrich, Galt, Ont.
- SAWMILLS**
G. & J. Esplen, Montreal, Que.
*The Waterous Engine Works Co., Ltd., Brantford, Ont.
- SAWS, specialties**
*Victor Saw Works, Ltd., Hamilton, Ont.
- SCALES**
The Gurney Scale Co., Hamilton, Ont.
- SCALES, counter**
The Gurney Scale Co., Hamilton, Ont.
- SCALES, railway track, etc.**
The Gurney Scale Co., Hamilton, Ont.
- SCREENS:**
*Canada Wire & Iron Goods Co., Hamilton.
*Jeffrey Mfg. Co., Montreal.
- SCREEN DOORS AND WINDOWS**
Sanderson-Harold Co., Ltd., Paris, Ont.
Ham & Nott Co., Ltd., Brantford, Ont.
- SCREWS:**
*John Morrow Screw & Nut Co., Ltd., Ingersoll.
*The National Acme Mfg. Co., Montreal.
*The Steel Co. of Canada, Ltd., Hamilton.
- SCREW PLATES**
*Butterfield & Co., Rock Island, P.Q.
- SECURITIES, engraved**
American Bank Note Co., Ottawa, Ont.
- SEGES**
Rosamond Woollen Co., Almonte, Ont.
- SHAFTING.**
Canada Forge Co., Ltd., Welland, Ont.
*Canadian Drawn Steel Co., Ltd., Hamilton.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*Union Drawn Steel Co., Ltd., Hamilton, Ont.
*Dodge Mfg. Co., Ltd., Toronto.
- SHANTY BLANKETS.**
Slingsby Mfg. Co., Ltd., Brantford, Ont.
- SHAPERS:**
*Berlin Machine Works, Ltd., Hamilton.
- SHEAR BLADES, iron**
The Peter Hay Knife Co., Ltd., Galt, Ont.
- SHEATHING**
*Paterson Manufacturing Company, Toronto and Montreal.
- SHEATHING, asbestos corrugated:**
*Eureka Mineral Wool & Asbestos Co., Toronto.
- SHEET METAL WARE (iron, galvanized and enamelled)**
Sheet Metal Products Co. of Canada, Ltd., Toronto.
- SHEET METAL STAMPINGS**
Acme Stamping & Tool Works, Ltd., Hamilton, Ont.
- SHELLAC**
*Berry Bros., Ltd., Winnipeg.
- SHINGLES, asbestos cement:**
*Canadian H. W. Johns-Manville Co., Toronto.
- SHIRTS**
MacKenzie & Co., Ottawa, Ont.
Williams, Greene & Rome, Berlin, Ont.
Peerless Overall Co., Rock Island, Que.
John W. Peck & Co., Ltd., Montreal, Que.
- SHIRTS, workmen's**
A. R. Clarke & Co., Ltd., Toronto
- SHOE PEGWOOD**
O. Chalifour, Quebec, Que.
- SHOE LININGS**
Galt Knitting Co., Ltd., Galt, Ont
- SHOES, running and athletic**
Ames-Holden-McCready, Ltd., Montreal, Que.
- SHOOKS**
Barchard & Co., Ltd., Montreal, Que.
- SILVER BULLION**
Coniagas Reduction Co., Ltd., St. Catharines, Ont.
- SILVERWARE**
Toronto Silver Plate Co., Ltd.
- SILVERSMITH**
Canadian Wm. A. Rogers, Ltd., Toronto.
Standard Silver Co., Toronto.
- SILVERWARE, sterling**
Roden Bros., Ltd., Toronto.
- SINKS, enameled**
Amherst Foundry Co., Ltd., Amherst, N.S.
- SKATES, figure**
Canada Cycle & Motor Co., Ltd., Toronto.
- SKATES, genuine Acme**
Canada Cycle & Motor Co., Ltd., Toronto.
- SKATES, hockey**
Canada Cycle & Motor Co., Ltd., Toronto.
- SKATES, ice**
Canada Cycle & Motor Co., Ltd., Toronto.
- SKIFFS**
Peterboro Canoe Co., Ltd., Peterboro, Ont.
- SKYLIGHTS:**
*Metallic Roofing Co., Ltd., Toronto.
*Pedlar People Ltd., Oshawa, Ont.
- SLEIGHS**
Tudhope-Anderson Co., Ltd., Orillia, Ont.
- SLIPPERS**
Ames-Holden-McCready, Ltd., Montreal, Que.
- SMOKE CONSUMERS.**
*The Jones Underfeed Stoker Co., Ltd., Toronto.
- SOAPS**
J. Barsalou & Co., Ltd., Montreal, Que.
- SOAP (soft, oil)**
The Imperial Varnish & Color Co., Ltd., Toronto.
The Sherwin-Williams Co. of Canada, Ltd., Montreal.
- SODA WATER FOUNTAINS**
J. J. McLaughlin, Ltd., Toronto.
- SOIL PIPE**
Anthes Foundry, Ltd., Toronto.
- SOLDER**
Alonzo W. Spooner, Ltd., Port Hope, Ont.
*The Canada Metal Co., Toronto.
- SOLDER, silver**
Geo. H. Lees & Co., Hamilton.
- SOLDER, wire and bar**
*American Can Co., Montreal, and Hamilton.
- SNOWSHOES**
Holt, Renfrew, Ltd., Quebec, Que.
- SPARK PLUGS**
Canadian Carbon Co., Ltd., Toronto.
- SPIRAL CONVEYORS.**
Canadian Mathews Gravity Carrier Co., Ltd., Toronto.
*The Goldie & McCulloch Co., Ltd., Galt, Ont.
- SPLIT PEAS**
H. Murten, Guelph, Ont.
- SPIKES, railway and marine**
Starr Mfg. Co., Ltd., Dartmouth, N.S.
- SPIRITS**
The St. Hyacinthe Distillery Co., Ltd., St. Hyacinthe, Que.
*Hiram Walker & Sons, Ltd., Walkerville, Ont.
- SPORTING MEDALS AND TROPHIES**
Roden Bros., Ltd., Toronto.
- SPRAYERS**
Sproamotor Co., London, Ont.
- SPRING COTTERS**
*Richards-Wilcox Canadian Co., Ltd., London, Ont.
- SPEINGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
B. J. Coghlin Co., Ltd., Montreal, Que.
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRINGS, carriages and automobile**
Guelph Spring & Axle Co., Ltd., Guelph, Ont.
- SPRINKLER SYSTEMS.**
*Chicago Bridge & Iron Works, Bridgeburg, Ont.
*General Fire Equipment Co., Ltd., Toronto.
*Purdy, Mansell, Ltd., Toronto.
*Vogel Co. of Canada, Ltd., Montreal.

- STAINS**
R. C. Jamieson & Co., Ltd., Montreal, Que.
- STAINS, creosote shingle**
A. Muirhead Co., Ltd., Toronto.
- STAMPINGS**
*Dominion Stamping Co., Ltd., Walkerville, Ont.
- STAMPS, steel, brass and rubber**
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
- STAMP MILLS:**
*Jenckes Machine Co., Sherbrooke.
- STATIONERY, office**
Harris Lithographing Co., Toronto.
- STEAM PIPE AND BOILER COVERINGS, asbestos:**
*Canadian H. W. Johns-Manville Co., Toronto.
*Eureka Mineral Wool & Asbestos Co., Toronto.
- STEAM SHOVELS**
*M. Beatty & Sons, Ltd., Welland, Ont.
- STEAM SPECIALTIES:**
*Sheldons, Ltd., Galt.
- STEAM TRAPS**
*Canadian Sirocco Co., Windsor, Ont.
*Canadian Morehead Manufacturing Co., Limited, Woodstock.
- STEEL:**
*Nova Scotia Steel & Coal Co., Ltd., New Glasgow, N.S.
- STEEL BUILDINGS**
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*Dominion Bridge Co., Ltd., Montreal.
*Pedlar People, Ltd., Oshawa, Ont.
- STEEL CASTINGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
*Dominion Steel Foundry Co., Ltd., Hamilton.
- STEEL PEN STOCKS:**
*Jenckes Machine Co., Sherbrooke.
- STEEL RODS:**
*The Steel Co. of Canada, Ltd., Hamilton.
- STEEL SASH:**
*Dennis Wire & Iron Works Co., London.
*Henry Hope & Sons, Ltd., Toronto.
- STEEL SHELVING:**
*Dennis Wire & Iron Works Co., London.
- TELEPHONE ACCESSORIES,**
*Northern Electric Co., Limited, Montreal.
- STENCILS, brass**
Pritchard-Andrews Co. of Ottawa, Ltd., Ottawa, Ont.
- STEREOTYPING**
Central Press Agency, Toronto.
- STOKERS,**
*The Jones Underfeed Stoker Co., Ltd., Toronto.
- STOOLS AND BENCHES, piano and organ**
*Otterville Mfg. Co., Ltd., Otterville, Ont.
- STONE**
The Corinthian Stone Co., Guelph, Ont.
The Hagersville Contracting Co., Hagersville, Ont.
- STORE FITTINGS**
The Canadian Office & School Furniture Co., Ltd., Preston, Ont.
- STOVES**
Tudhope-Anderson Co., Ltd., Orillia, Ont.
Bedford Stove Co., Bedford, Que.
- STOVE BOARDS**
Sheet Metal Products Co. of Canada, Ltd., Toronto.
- STOVE LININGS**
Standard Clay Products, Ltd., St. Johns, Que.
- STOVES AND RANGES**
Bedford Stove Co., Bedford, Que.
Gurney Foundry Co., Ltd., Toronto.
Lee Mfg. Co., Ltd., Pembroke, Ont.
The Jas. Smart Mfg. Co., Ltd., Brockville, Ont.
McClary Mfg. Co., London, Ont.
- STRETCHERS, lace curtain**
*Otterville Mfg. Co., Ltd., Otterville, Ont.
- STRUCTURAL STEEL**
Dominion Bridge Co., Montreal.
*Hamilton Bridge Works Co., Ltd., Hamilton.
*The Canadian Bridge Co., Ltd., Walkerville, Ont.
*The Structural Steel Co., Ltd., Montreal.
- SUIT CASES**
J. Eveleigh & Co., Ltd., Montreal.
The M. Langmuir Mfg. Co. of Toronto, Ltd., Toronto.
- SURFACERS:**
*Berlin Machine Works, Ltd., Hamilton.
- SWITCHBOARDS**
*The Canadian Independent Telephone Co., Ltd., Toronto.
- SWITCHES, railway**
Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
- SWITCHES AND FROGS**
*Canadian Steel Foundries, Ltd., Montreal, Que.
- SWITCH STANDS**
*Canadian Ramapo Iron Works, Ltd., Niagara Falls, Ont.
- TABLES, billiard**
Samuel May & Co., Toronto.
- TABLE COVERS, chenille**
Hamilton Cotton Co., Hamilton, Ont.
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Business Systems, Ltd., Toronto.
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*Chicago Bridge & Iron Works, Bridgeburg, Ont.
Goold-Shapley-Muir Co., Ltd., Brantford, Ont.
*Ontario Wind Engine & Pump Co., Ltd., Toronto.
*The Goldie & McCullough Co., Ltd., Galt.
*The Watrous Engine Works Co., Ltd., Brantford.
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McClary Mfg. Co., London, Ont.
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Pratt and Whitney Co. of Canada, Dundas, Ont.
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- TAP WRENCHES**
*Butterfield & Co., Rock Island, P.Q.
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*Northern Electric Co., Limited, Montreal, Que.
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*The Canadian Independent Telephone Co., Ltd., Toronto.
- TELEPHONES, Automatic**
*Canadian Independent Telephone Co., Toronto.
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Turner, J. J., & Sons, Peterborough, Ont.
*Scythes & Co., Ltd., Toronto.
- TERRA ALBA**
*Albert Mfg. Co., Hillsborough, N.B.
- TERRA COTTA (architectural)**
Toronto Plate Glass Importing Co., Ltd., Toronto.
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*Canadian H. W. Johns-Manville Co., Toronto.
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*Canadian Billings & Spencer, Ltd., Welland.
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Dunlop Tire & Rubber Goods Co., Ltd., Toronto.
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*The B.C. Mills Timber & Trading Co., Vancouver, B.C.
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*International Time Recording Co. of Canada, Ltd., Toronto.
- TIN WARE (stamped, pierced, japanned and lithographed)**
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- TIRES, cycle, auto and truck.**
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- TRANSFORMERS, power**
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.
- TRANSFORMERS, distributing**
*Canadian Crocker Wheeler Co., Ltd., St. Catharines, Ont.
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*The Goldie & McCulloch Co., Ltd., Galt, Ont.
*The Watrous Engine Works Co., Ltd., Brantford.
- TROLLEYS.**
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Northern Crane Works, Limited, Walkerville.
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J. Eveleigh & Co., Ltd., Montreal, Que.
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*Tallman Brass and Metal Co., Hamilton, Ont.
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- TURBINES, steam:**
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*Canadian Hart Wheels, Ltd., Hamilton, Ont.
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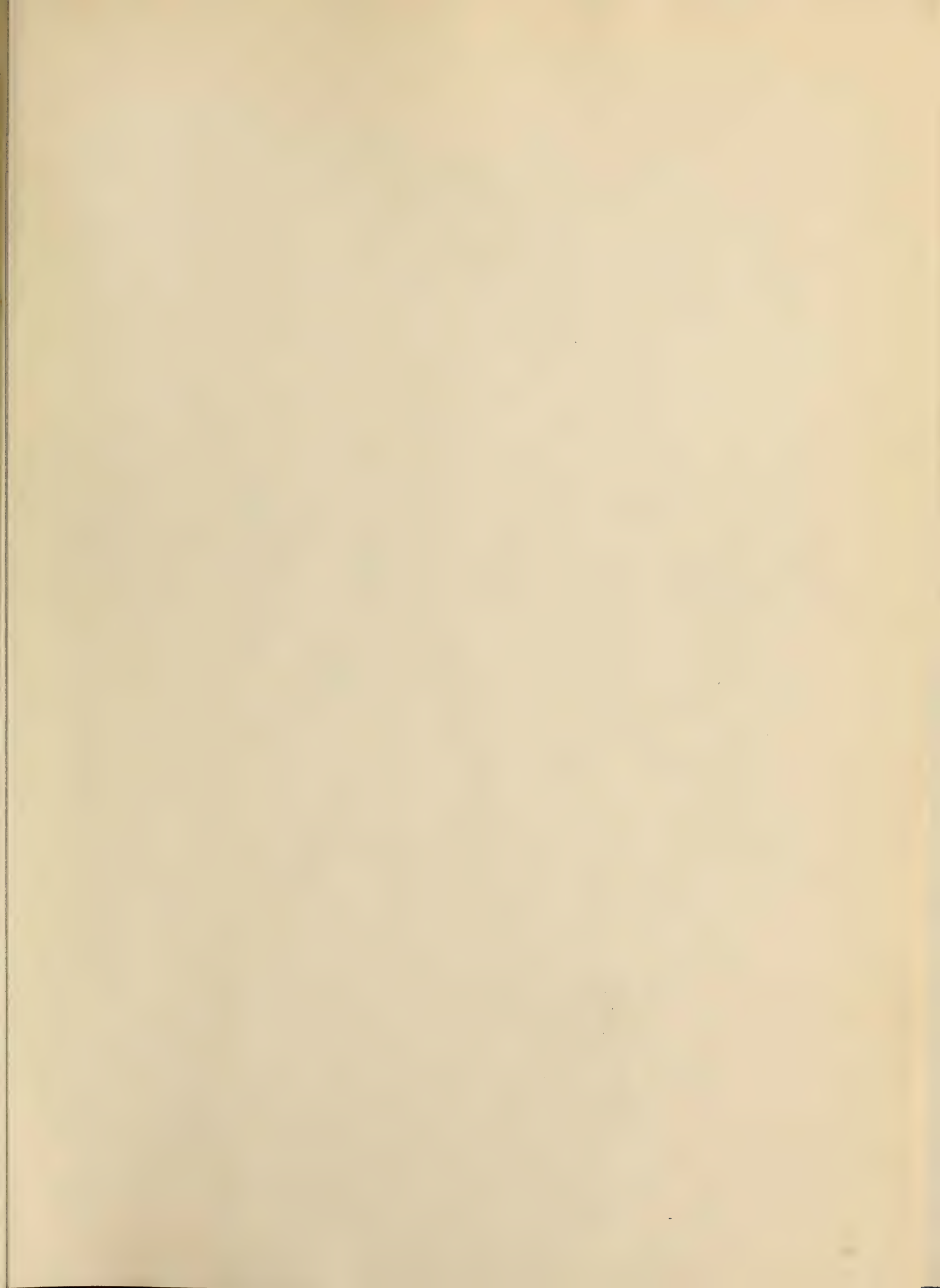
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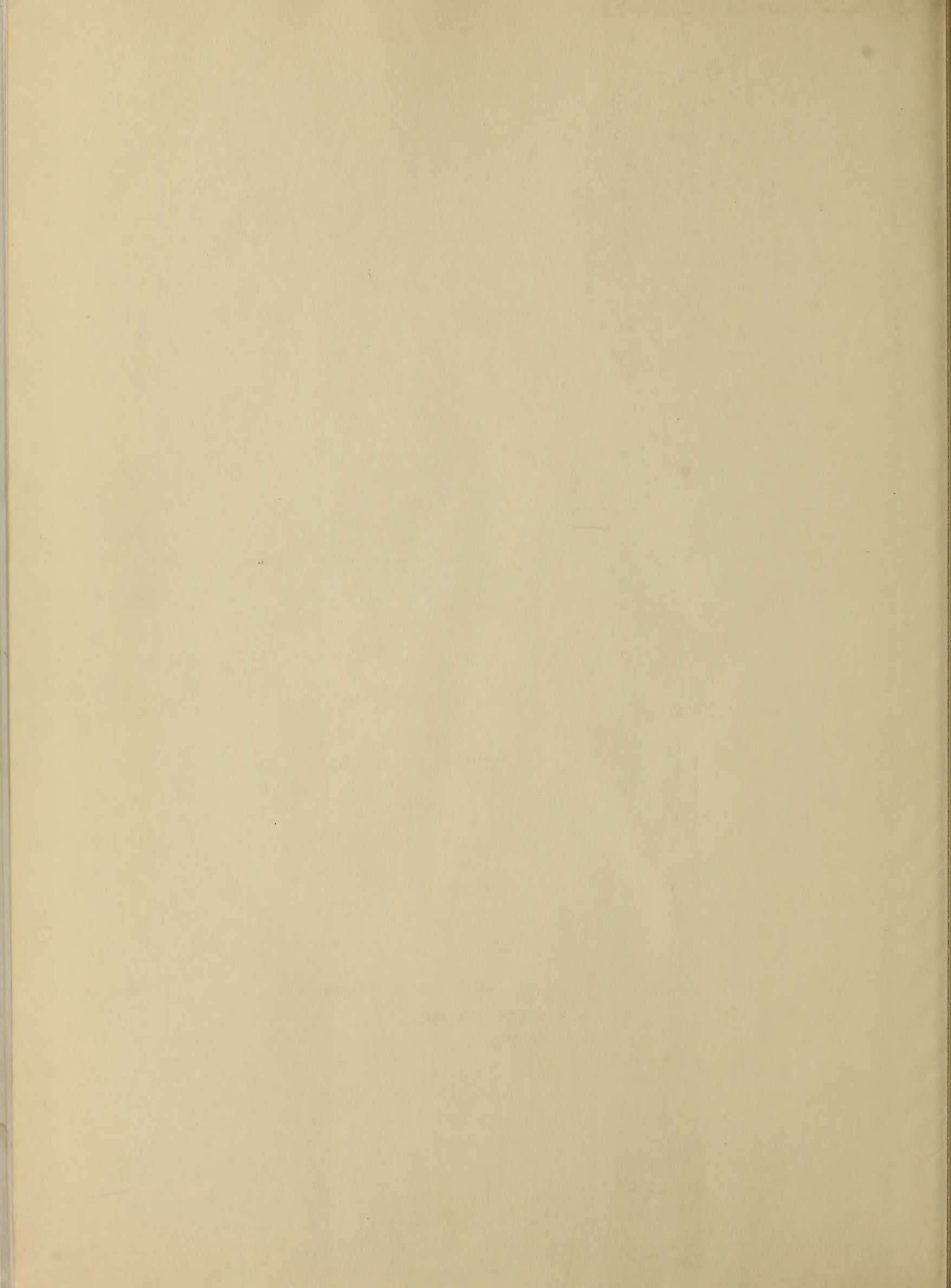
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